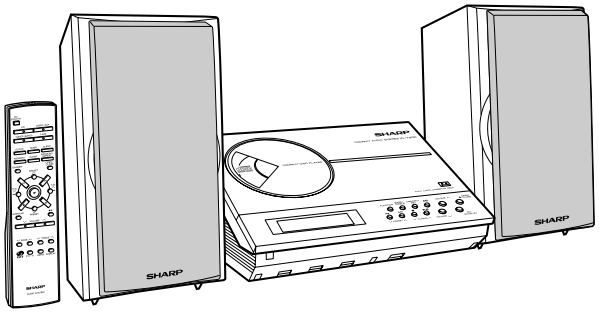
SHARP SERVICE MANUAL

No. S4225XLT300H/

COMPACT AUDIO SYSTEM



MODEL XL-T300H

XL-T300H Compact Audio System consisting of XL-T300H (main unit) and CP-XLT300H (speaker system).

COMPACT disc DIGITAL AUDIO

R·D·S

SAVING ENERGY STAND-BY POWER CONSUMPTION 0.6W

ENERGY

(Except for U.K.)

• In the interests of user-safety the set should be restored to its original condition and only parts identical to those specified should be used.

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SHARP CORPORATION

This document has been published to be used for after sales service only.
The contents are subject to change without notice.

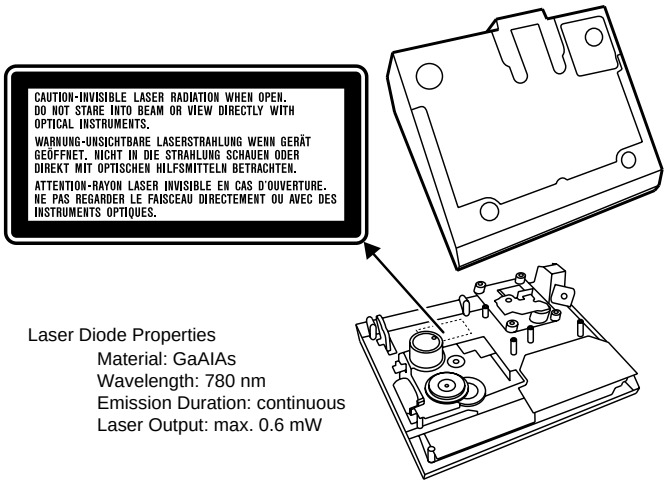
SAFETY PRECAUTION FOR SERVICE MANUAL

This product is classified as a CLASS 1 LASER PRODUCT.

Precaution to be taken when replacing and servicing the Laser Pickup.

The AEL (Accessible Emission Level) of Laser Power Output is less than Class 1 but the laser component is capable of emitting radiation exceeding the limit for Class1. Therefore it is important that the following precautions must be observed during servicing to protect your eyes against exposure to the Laser beam.

(1) When the cabinet has been removed, the power is turned on without a compact disc, and the Pickup is on a position outer than the lead-in position, the Laser will light for several seconds to detect a disc. Do not look into the Pickup Lens.
(2) The Laser Power Output of the Pickup inside the unit and replacement service parts have already been adjusted prior to shipping.
(3) No adjustment to the Laser Power should be attempted when replacing or servicing the Pickup.
(4) Under no circumstances look directly into the Pickup Lens at any time.
(5) CAUTION - Use of controls or adjustments, or performance of procedures other than those specified herein may result in hazardous radiation exposure.


CAUTION-INVISIBLE LASER RADIATION WHEN OPEN.
DO NOT STARE INTO BEAM OR VIEW DIRECTLY WITH OPTICAL INSTRUMENTS.
WARNUNG-UNSICHTBARE LASERSTRAHLUNG WENN GERÄT GEÖFFNET. NICHT IN DIE STRAHLUNG SCHAUEN ODER DIREKT MIT OPTISCHEN HILFSMITTELN BETRACHTEN.
ATTENTION-RAYON LASER INVISIBLE EN CAS D'OUVERTURE. NE PAS REGARDER LE FAISCEAU DIRECTEMENT OU AVEC DES INSTRUMENTS OPTIQUES.

Laser Diode Properties
Material: GaAlAs
Wavelength: 780 nm
Emission Duration: continuous
Laser Output: max. 0.6 mW

ADVERSEL-SYNLIG OG USYNLIG LASERSTRÅLING VED ÅBNING. SE IKKE IND I STRÅLEN-HELLER IKKE MED OPTISKE INSTRUMENTER.

VARO! AVATTAESSA OLET ALTTIINA NÄKYVÄLLE JA NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE ÄLÄ TUIJOTA SÄTEESEEN ÄLÄKÄ KATSO SITÄ OPTISEN LAITTE EN LÄPI.

VARNING-SYNLIG OCH OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. STIRRA EJ IN I STRÅLEN OCH BETRAKTA EJ STRÅLEN GENOM OPTISKT INSTRUMENT.

VAROITUS! LAITTEEN KÄYTTÄMINEN MUULLA KUIN TÄSSÄ KÄYTTÖOHJEESSA MAINITULLA TAVALLA SAATTAA ALTISTAA KÄYTTÄJÄN TURVALLISUUSLUOKAN 1 YLITTÄVÄLLE NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE.

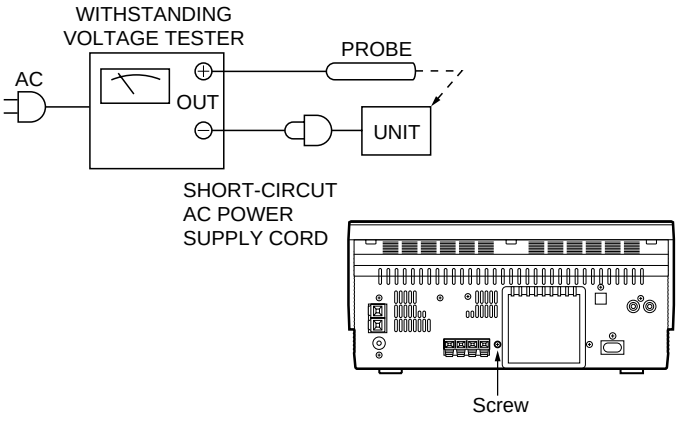
VARNING - OM APPARATEN ANVÄNDS PÅ ANNAT SÄTT ÄN I DENNA BRUKSANVISNING SPECIFICERAS. KAN ANVÄNDAREN UTSÄTTAS FÖR OSYNLIG LASER-STRÅLNING, SOM ÖVERSKRIDER GRÄNSEN FÖR LASERKLASS 1.

IMPORTANT SERVICE NOTES (FOR U.K. ONLY)

Before returning the unit to the customer after completion of a repair or adjustment it is necessary for the following withstand voltage test to be applied to ensure the unit is safe for the customer to use.

Setting of Withstanding Voltage Tester and set.

Set name	set value
Withstanding Voltage Tester	
Test voltage	4,240 VPEAK 3,000 VRMS
Set time	6 secs
Set current(Cutoff current)	4 mA
Unit	
Judgment	
OK: The “GOOD” lamp lights. NG: The “NG” lamp lights and the buzzor sounds.	



FOR A COMPLETE DESCRIPTION OF THE OPERATION OF THIS UNIT, PLEASE REFER TO THE OPERATION MANUAL.

SPECIFICATIONS

■ General

Power source	AC 230 V, 50 Hz
Power consumption	Power on: 46 W Power stand-by: 0.6 W
Dimensions	Width: 290 mm (11-7/16") Height: 130 mm (5-1/8") Depth: 260 mm (10-1/4")
Weight	3.7 kg (8.2 lbs.)

■ Amplifier **Except for U.K.**

Output power	PMPO: 120 W (total) MPO: 60 W (30 W + 30 W) (DIN 45 324) RMS: 40 W (20 W + 20 W) (DIN 45 324)
Output terminals	Speakers: 6 ohms Headphones: 16 - 50 ohms (recommended: 32 ohms) CD digital output (optical)
Input terminals	Video/Auxiliary (audio signal): 500 mV/47 kohms

■ Amplifier **For U.K.**

Output power	RMS: 40 W (20 W + 20 W) (10 % T.H.D.)
Output terminals	Speakers: 6 ohms Headphones: 16 - 50 ohms (recommended: 32 ohms) CD digital output (optical)
Input terminals	Video/Auxiliary (audio signal): 500 mV/47 kohms

■ CD player

Type	Compact disc player
Signal readout	Non-contact, 3-beam semiconductor laser pickup
D/A converter	1-bit D/A converter
Frequency response	20 - 20,000 Hz
Dynamic range	90 dB (1 kHz)

Specifications for this model are subject to change without prior notice.

■ Tuner

Frequency range	FM: 87.5 - 108 MHz AM: 522 - 1,620 kHz

■ Cassette deck **Except for U.K.**

Frequency response	50-14,000 Hz (Normal tape)
Signal/noise ratio	50 dB (recording/playback)
Wow and flutter	0.3 % (DIN 45 511)

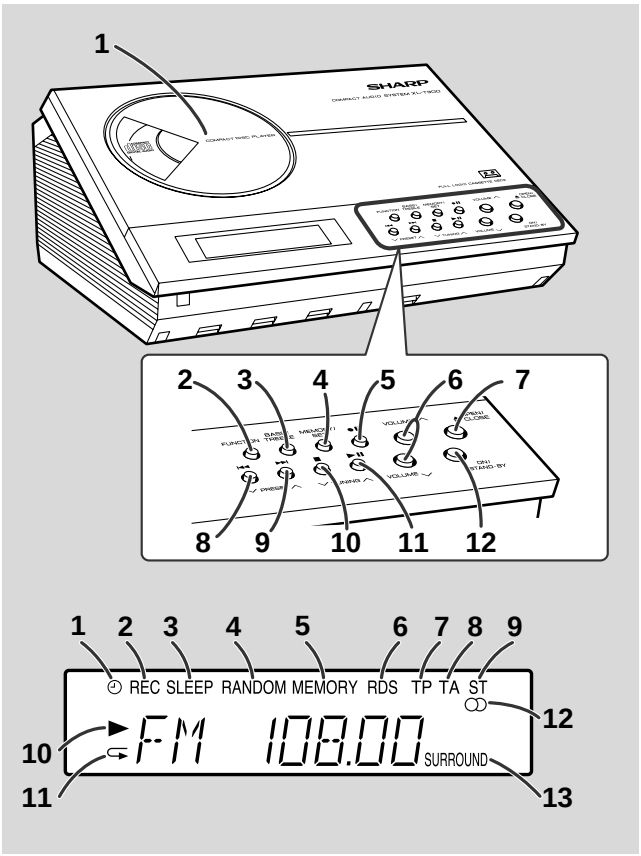
■ Cassette deck **For U.K.**

Frequency response	50-14,000 Hz (Normal tape)
Signal/noise ratio	50 dB (recording/playback)
Wow and flutter	0.25 % (WRMS)

■ Speaker

Type	2-way type speaker system 5 cm (2") Tweeter 10 cm (4") Woofer
Maximum input power	40 W
Rated input power	20 W
Impedance	6 ohms
Dimensions	Width: 146 mm (5-3/4") Height: 267 mm (10-9/16") Depth: 203 mm (8")
Weight	2.0 kg (4.4 lbs.)/each

NAMES OF PARTS

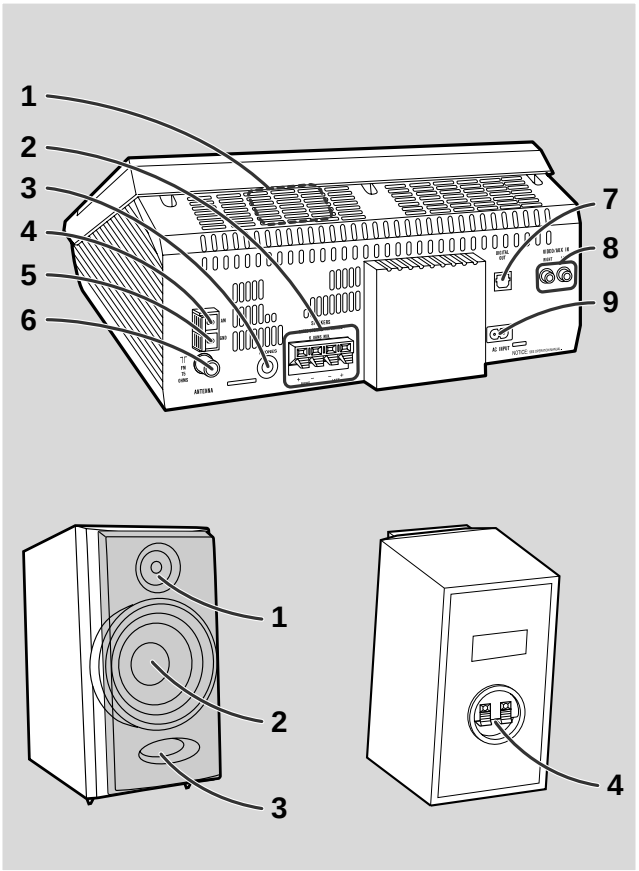


■ Front panel

1. CD/Cassette Compartment
2. Function Selector Button
3. Bass/Treble Selector Button
4. Memory/Set Button
5. Tape Record Pause Button
6. Volume Up and Down Buttons
7. CD or Tape Open/Close Button
8. CD Track Down or Fast Reverse, Tape Rewind, Tuner Preset Down Button
9. CD Track Up or Fast Forward, Tape Fast Forward, Tuner Preset Up Button
10. CD or Tape Stop, Tuning Down Button
11. CD Play or Pause, Tape Play, Tuning Up Button
12. On/Stand-by Button

■ Display

1. Timer Play Indicator
2. Tape Record Indicator
3. Sleep Indicator
4. CD Random Play Indicator
5. Memory Indicator
6. RDS Indicator
7. Traffic Programme Indicator
8. Traffic Announcement Indicator
9. FM Stereo Mode Indicator
10. CD Play Indicator
11. CD Repeat Play Indicator
12. FM Stereo Receiving Indicator
13. Surround Indicator



■ Rear panel

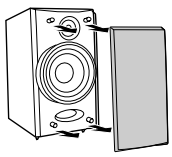
1. Cooling Fan
2. Speaker Terminals
3. Headphone Socket
4. AM Aerial Terminal
5. Aerial Earth Terminal
6. FM 75 Ohms Aerial Socket
7. CD Digital Output Socket
8. Video/Auxiliary (Audio Signal) Input Sockets
9. AC Power Input Socket

■ Speaker system

1. Tweeter
2. Woofer
3. Bass Reflex Duct
4. Speaker Terminals

Speaker grilles are removable:

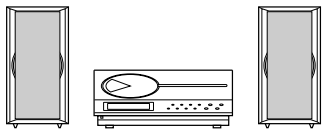
Make sure nothing comes into contact with the speaker diaphragms when you remove the speaker grilles.

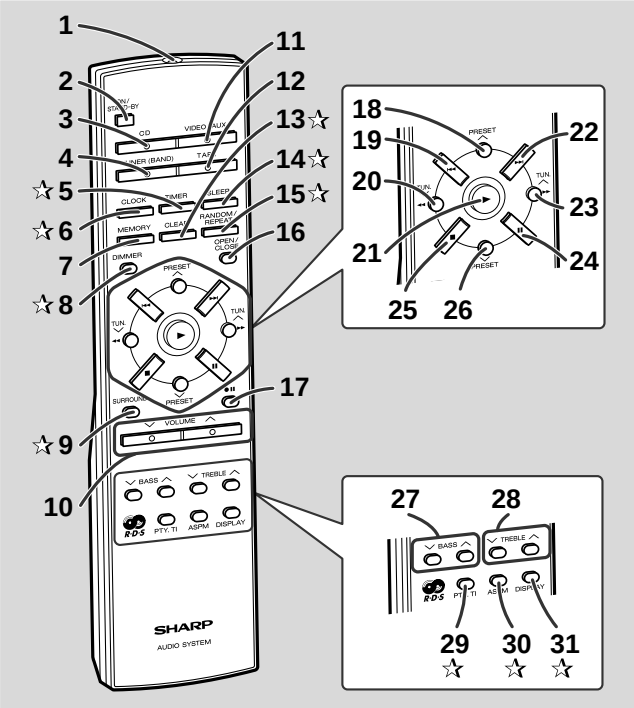


Placing the speaker system:

There is no distinction between the right and the left speakers.

Left speaker Right speaker





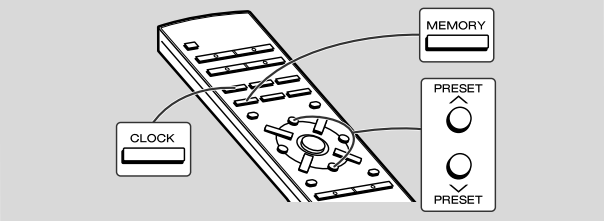
Buttons with "☆" mark in the illustration can be operated on the remote control only.

■ Remote control

1. Remote Control Transmitter
2. On/Stand-by Button
3. CD Button
4. Tuner and Band Selector Button
5. **Timer Button**
6. **Clock Button**
7. Memory Button
8. **Dimmer Button**
9. **Surround Button**
10. Volume Up and Down Buttons
11. Video/Auxiliary Button
12. Tape Button
13. **Clear Button**
14. **Sleep Button**
15. **Random/Repeat Button**
16. CD or Tape Open/Close Button
17. Tape Record Pause Button
18. Tuner Preset Up Button
19. CD Track Down Button
20. CD Fast Reverse, Tuning Down, Tape Rewind Button
21. CD or Tape Play Button
22. CD Track Up Button
23. CD Fast Forward, Tuning Up, Tape Fast Forward Button
24. CD Pause Button
25. CD or Tape Stop Button
26. Tuner Preset Down Button
27. Bass Up and Down Buttons
28. Treble Up and Down Buttons
29. **RDS Programme Type/ Traffic Information Search Button**
30. **RDS ASPM (Auto Station Programme Memory) Button**
31. **RDS Display Mode Selector Button**

OPERATION MANUAL

Setting the clock



This may be operated only with the remote control.
In this example, the clock is set for the 24-hour (0:00) display.

1 **Press the CLOCK button and within 3 seconds, press the MEMORY button.**

2 **Within 1 minute, press the PRESET (∨ or ∧) button to select 24-hour or 12-hour display and then press the MEMORY button.**

"0:00" → The 24-hour display will appear.
(0:00 - 23:59)

"AM 12:00" → The 12-hour display will appear.
(AM 12:00 - PM 11:59)

Note that this can only be set when the unit is first installed or it has been reset.

3 **Within 1 minute, press the PRESET (∨ or ∧) button to adjust the hour and then press the MEMORY button.**

When the 12-hour display is selected, "AM" will change automatically to "PM".

4 **Within 1 minute, press the PRESET (∨ or ∧) button to adjust the minutes and then press the MEMORY button.**

The clock starts from "0" second. (Seconds are not displayed.)

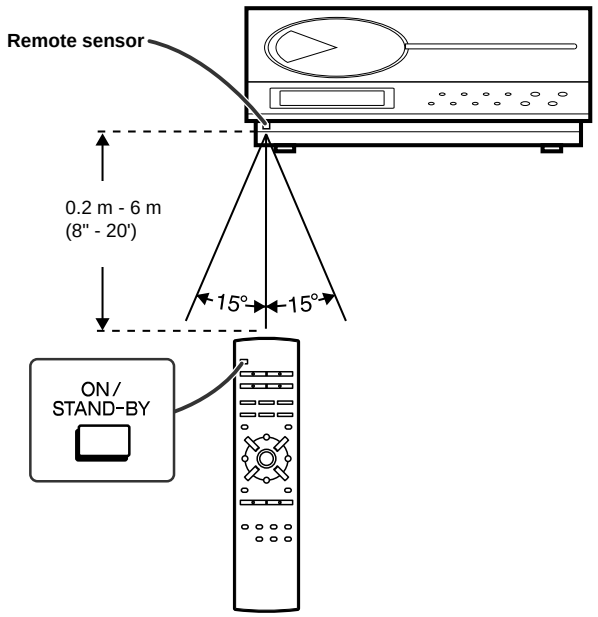
To confirm the time display when the power is on:
Press the CLOCK button.
The time display will appear for about 5 seconds.
Note:
The "0:00" or time will flash at the push of the CLOCK button when the AC power supply is restored after a power failure or unplugging the unit.
Readjust the clock as follows.
To readjust the clock:
Perform "Setting the clock" from the beginning. If the time display is flashing, step 2 (for selecting the 24-hour or 12-hour display) will be skipped.
To change the 24-hour or 12-hour display:
1 Clear all the programmed contents.
2 Perform "Setting the clock" from the beginning.

Remote control

■ Test of the remote control

Face the remote control directly to the remote sensor on the unit.

The remote control can be used within the range shown below:
Press the ON/STAND-BY button. Does the power turn on? Now, you can enjoy the music.



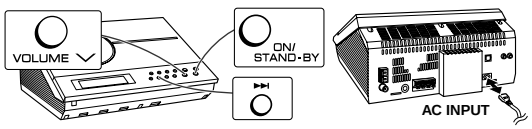
Troubleshooting Chart

■ If trouble occurs

When this product is subjected to strong external interference (mechanical shock, excessive static electricity, abnormal supply voltage due to lightning, etc.) or if it is operated incorrectly, it may malfunction.

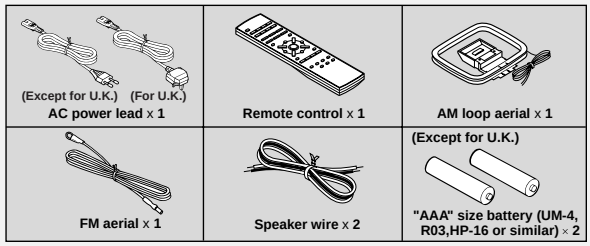
If such a problem occurs, do the following:

1 Set the unit to the stand-by mode and turn the power on again.
2 If the unit is not restored in step 1, unplug and plug in the unit, and then turn the power on.
3 If neither step 1 nor 2 restores the unit, do the following:
① Press the ON/STAND-BY button to enter the power stand-by mode.
② Unplug the AC power lead from the AC INPUT socket on the unit.
③ Whilst pressing down the VOLUME ∨ button and the ▶▶| button, plug the AC power lead into the AC INPUT socket on the unit.



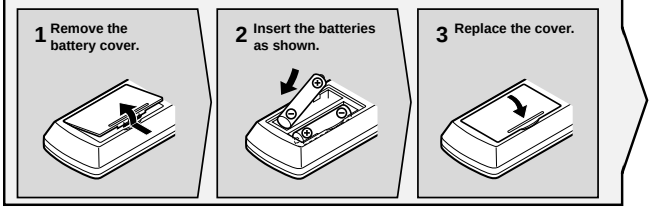
Caution:
This operation will erase all data stored in memory including clock, timer settings, tuner preset, and CD programme.

1 Accessories

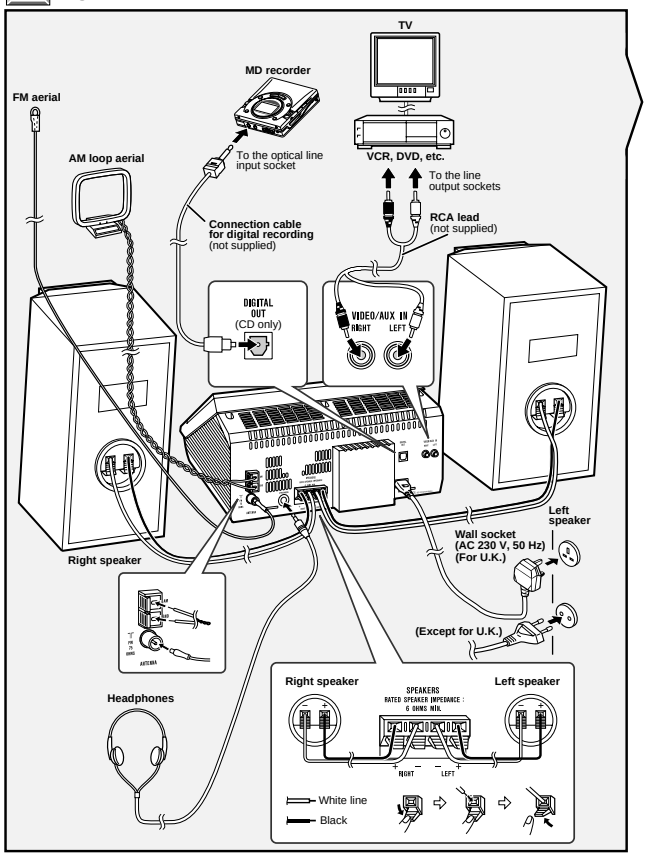

(Except for U.K.)
(For U.K.)
AC power lead x 1
Remote control x 1
AM loop aerial x 1
FM aerial x 1
Speaker wire x 2
(Except for U.K.)
"AAA" size battery (UM-4, R03,HP-16 or similar) x 2

2 Battery installation of remote control

Use 2 "AAA" size batteries (UM-4, R03, HP-16 or similar).
Batteries are not included.

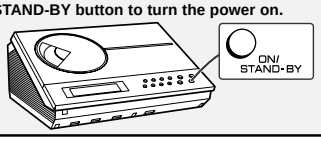


3 System Connections

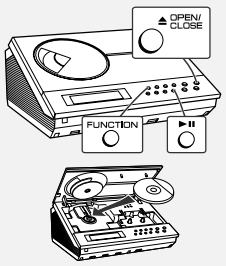


4 Turn on your System

Press the ON/STAND-BY button to turn the power on.

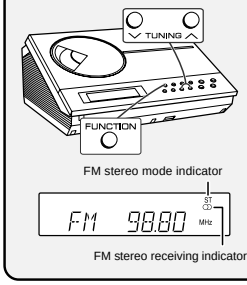


Listening to a CD



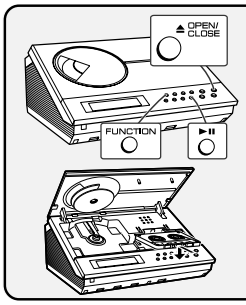
1	FUNCTION	**Press the FUNCTION button until "CD STOP" appears on the display.** If no disc is loaded, the display will be "NO DISC" instead of "CD STOP".
2	OPEN/ CLOSE	**Press the ⏏ OPEN/CLOSE button to open the CD/Cassette compartment.**
3		**Place a CD on the spindle, label side up.**
4	OPEN/ CLOSE	**Press the ⏏ OPEN/CLOSE button to close the CD/Cassette compartment.**
5	▶II	**Press the ▶II button to start playback from track 1.**

Listening to the Radio



1	FUNCTION	**Press the FUNCTION button until "FM" or "AM" appears on the display.**
2	TUNING	**Press the TUNING (∨ or ∧) button to tune in to the desired station.** When the TUNING button is pressed for more than 0.5 seconds, scanning will start automatically and the tuner will stop at the first receivable broadcast station.
3	FUNCTION	**To receive an FM stereo transmission: Press the FUNCTION button to display the "ST" indicator.** "CD" will appear when an FM broadcast is in stereo.

Listening to a Cassette Tape



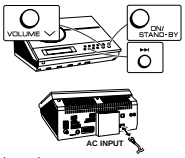
1	FUNCTION	**Press the FUNCTION button until "TAPE" appears on the display.**
2	OPEN/ CLOSE	**Press the ⏏ OPEN/CLOSE button to open the CD/Cassette compartment.**
3		**Load a cassette into the cassette compartment with the side to be played facing up.**
4	OPEN/ CLOSE	**Press the ⏏ OPEN/CLOSE button to close the CD/Cassette compartment.**
5	▶II	**Press the ▶II button to start playback.**

■ If trouble occurs

When this product is subjected to strong external interference (mechanical shock, excessive static electricity, abnormal supply voltage due to lightning, etc.) or if it is operated incorrectly, it may malfunction.

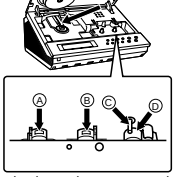
If such a problem occurs, do the following:

1. **Set the unit to the stand-by mode and turn the power on again.**
2. **If the unit is not restored in step 1, unplug and plug in the unit, and then turn the power on.**
3. **If neither step 1 nor 2 restores the unit, do the following:**
   - ① Press the ON/STAND-BY button to enter the power stand-by mode.
   - ② Unplug the AC power lead from the AC INPUT socket on the unit.
   - ③ Whilst pressing down the VOLUME ∨ button and the ▶▶I button, plug the AC power lead into the AC INPUT socket on the unit.



Caution:
This operation will erase all data stored in memory including clock, timer settings, tuner preset, and CD programmed.

■ Maintenance



Cleaning the CD pickup lens
Do not touch the laser pickup lens. If fingerprints or dust accumulate on the pickup, clean it gently with a dry cotton swab.

Cleaning the tape-handling parts

- Dirty heads, capstan or pinch roller can cause poor sound and tape jams. Clean these parts with a cotton swab moistened with commercial head/pinch roller cleaner or isopropyl alcohol.
- When cleaning the heads, pinch roller, etc., unplug the unit which contains high voltages.
  Ⓐ Erase head Ⓒ Capstan
  Ⓑ Recording/Playback head Ⓓ Pinch roller
- After long use, the deck's heads and capstan may become magnetised, causing poor sound. Demagnetise these parts once every 30 hours of playing/recording time by using a commercial tape head demagnetiser. Read the demagnetiser's instructions carefully before use.

DISASSEMBLY

Caution on Disassembly
Follow the below-mentioned notes when disassembling the unit and reassembling it, to keep it safe and ensure excellent performance:
1. Take compact disc out of the unit.
2. Be sure to remove the power supply plug from the wall outlet before starting to disassemble the unit.
3. Take off nylon bands or wire holders where they need to be removed when disassembling the unit. After servicing the unit, be sure to rearrange the leads where they were before disassembling.
4. Take sufficient care on static electricity of integrated circuits and other circuits when servicing.

STEP	REMOVAL	PROCEDURE	FIGURE
1	Top Cabinet	1. Screw ..... (A1) x6 2. Hook ..... (A2) x4 3. Socket ..... (A3) x9 4. Flat Cable ..... (A4) x1	8-1,2 8-2
2	Bottom Cabinet /Chassis	1. Screw ..... (B1) x12 2. Hook ..... (B2) x3	8-1,3 8-3
3	Tuner PWB	1. Screw ..... (C1) x2 2. Socket ..... (C2) x1	9-1
4	Terminal PWB	1. Screw ..... (D1) x2 2. Socket ..... (D2) x2	9-1
5	Main PWB	1. Screw ..... (E1) x8 2. Socket ..... (E2) x3	9-1
6	CD Mechanism	1. Screw ..... (F1) x4	9-2
7	Tape Mechanism	1. Screw ..... (G1) x4	9-2
8	Gear Box	1. Screw ..... (H1) x3 2. Socket ..... (H2) x1	9-3
9	Switch PWB	1. Screw ..... (J1) x1	9-3
10	LED PWB/Holder PWB	1. Screw ..... (K1) x1	9-3
11	Display PWB /Switch PWB	1. Screw ..... (L1) x7 2. Hook ..... (L2) x4	9-3

Note:
After removing the connector for the optical pickup from the connector, wrap the conductive aluminium foil around the front end of connector remove to protect the optical pickup from electrostatic damage.

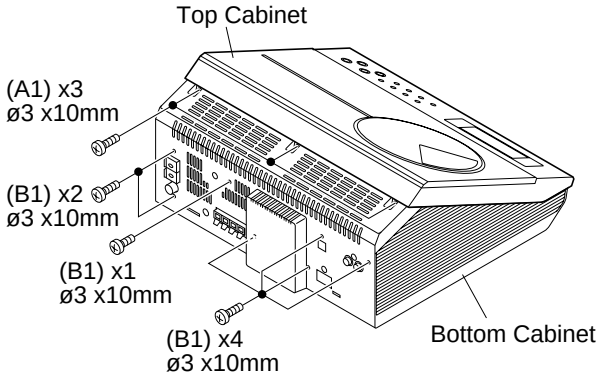


Figure 8-1

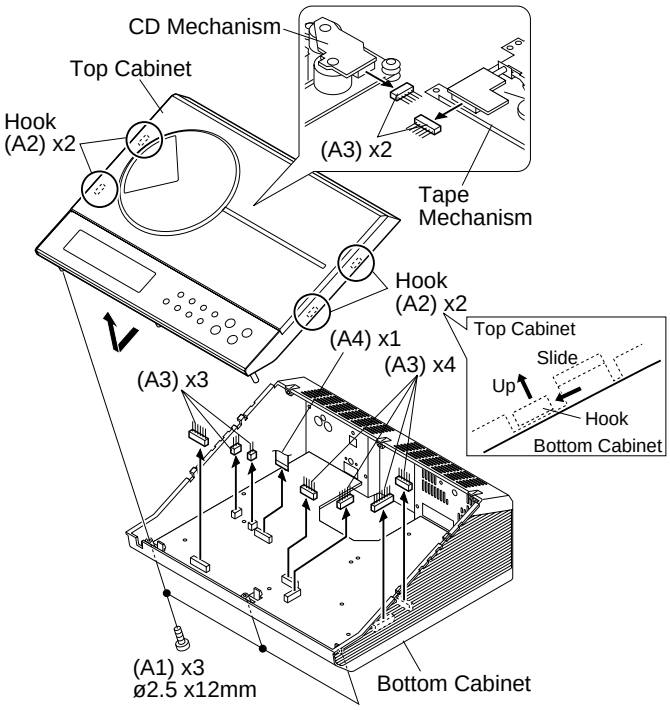


Figure 8-2

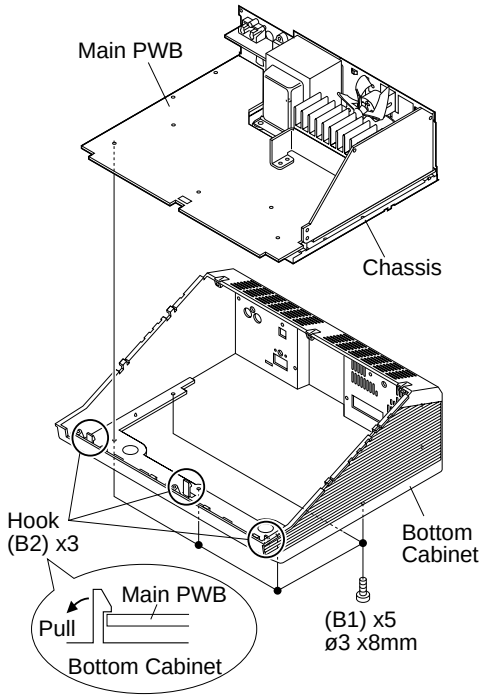


Figure 8-3

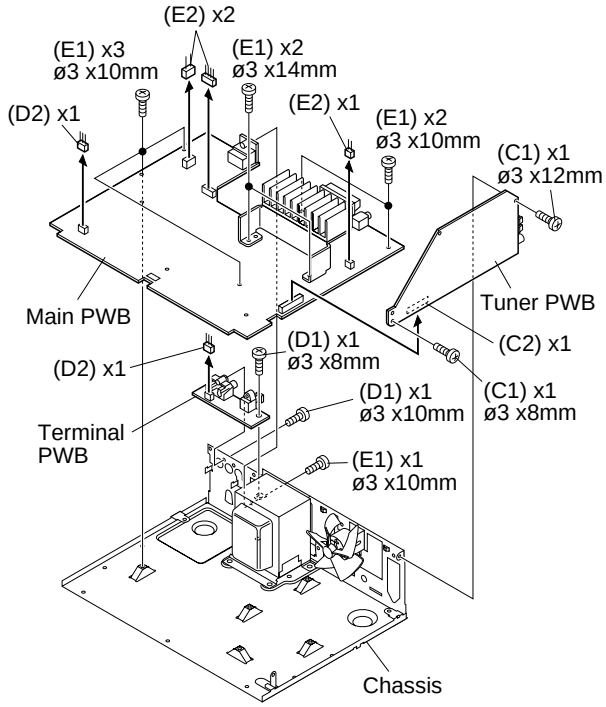


Figure 9-1

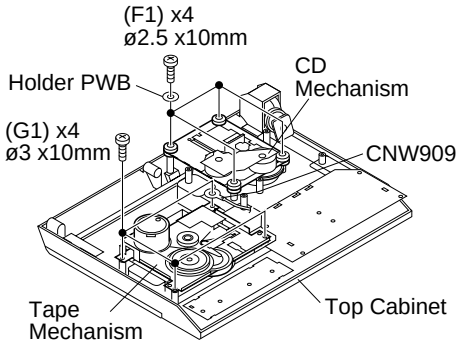


Figure 9-2

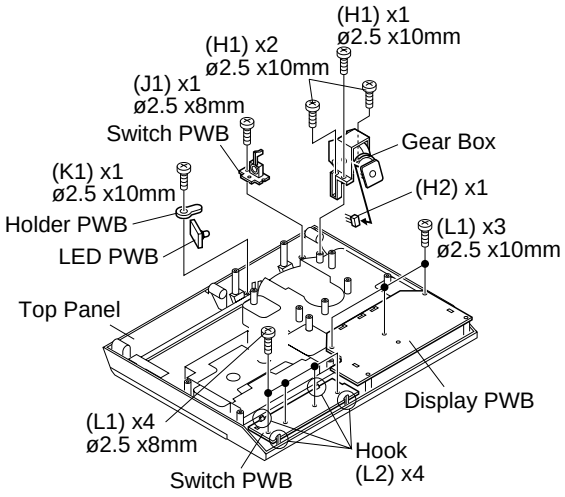


Figure 9-3

STEP	REMOVAL	PROCEDURE	FIGURE
1	Speaker	1. Net Frame ..... (A1) x1 2. Special Screw ..... (A2) x4 3. Screw ..... (A3) x2 4. Screw ..... (A4) x4	9-4

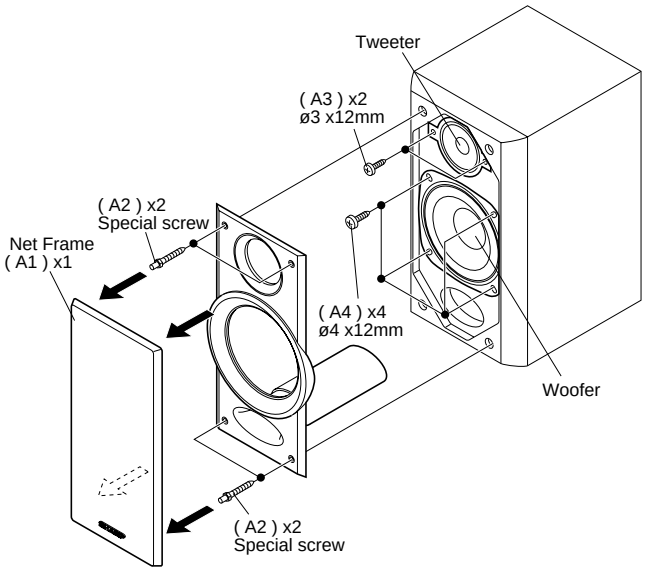


Figure 9-4

REMOVING AND REINSTALLING THE MAIN PARTS

TAPE MECHANISM SECTION

Perform steps 1 and 7 of the disassembly method to remove the tape mechanism. (See page 8,9.)

How to remove the record / playback and erase heads (See Fig. 10-1.)

1. Remove the screws (A1) x 2 pcs., to remove the erase head.
2. Remove the screws (A2) x 2 pcs., to remove the record/ playback head.

Note:

After replacing the heads and performing the azimuth adjustment, be sure to apply screwlock.

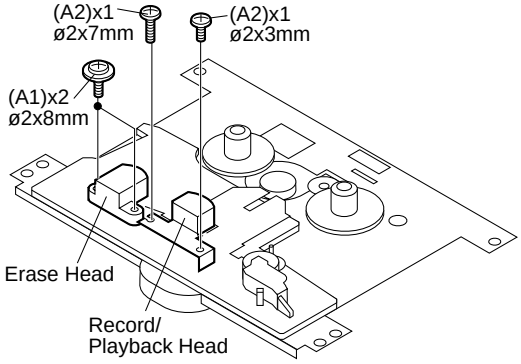


Figure 10-1

How to remove the pinch roller (See Fig. 10-2.)

1. Carefully bend the pinch roller pawl in the direction of the arrow **<A>**, and remove the pinch roller (B1) x 1 pc., upwards.

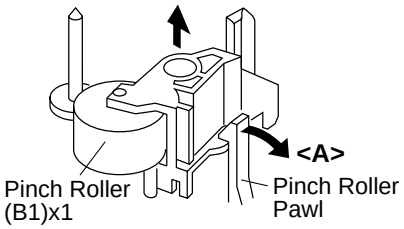


Figure 10-2

How to remove the belts (See Fig. 10-3.)

1. Remove the main belt (C1) x 1 pc., from the motor pulley.
2. Remove the FF/REW belt (C2) x 1 pc., from the REW/FF roller.
3. Put on the belts in the reverse order of removal.

Note:

When putting on the belt, ascertain that the belt is not twisted, and clean it.

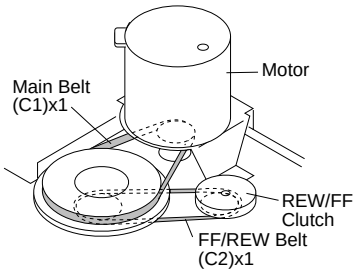


Figure 10-3

How to remove the motor (See Figs. 10-4.)

1. Remove the mainbelt.
2. Remove the screws (D1) x 2 pcs., to remove the motor bracket.
3. Remove the screws (D2) x 3 pcs., to remove the motor.

Note:

When mounting the motor, pay attention to the motor mounting angle

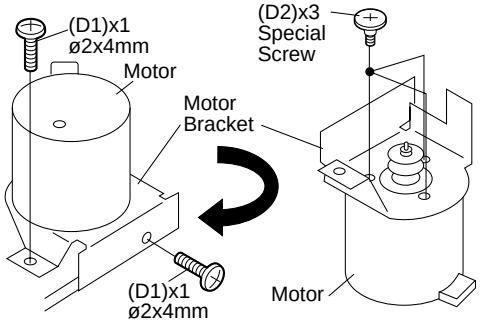


Figure 10-4

How to remove the flywheel (See Fig. 10-5.)

1. Remove the belt.
2. Remove the stop washer (E1) x 1 pc., with a small precision screwdriver to extract the flywheel from the capstan metal.

Note:

When the stop washer is deformed or damaged, replace it with a new one.

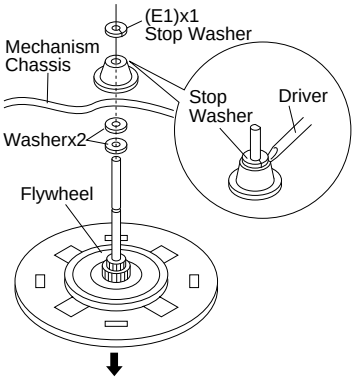


Figure 10-5

How to reinstall the parts

Install each part in the reverse order of the removal with care.

How to remove the tape mechanism PWB (See Fig. 11-1.)

1. Remove the screws (F1) x 1 pc., to remove the tape mechanism PWB.
2. Remove the screws (F2) x 1 pc.
3. Remove the solder joints (F3) x 2 pcs., to remove the tape mechanism PWB.

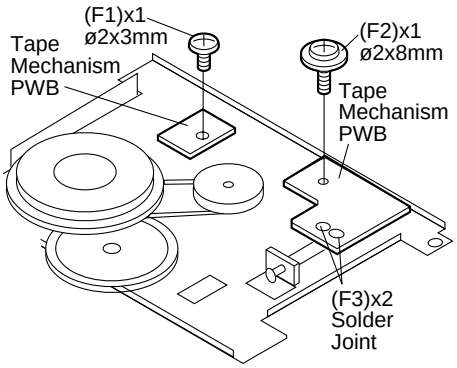


Figure 11-1

How to remove the CD lid (See Fig. 11-2.)

Perform steps 1 and 8 of the disassembly method to remove the gear box.(See page 8,9)

1. Remove the screws (A1) x 2 pcs., to remove the CD lid motor.
2. Remove the hooks (A2) x 3 pcs., to remove the worm wheel.

Caution:

Be careful so that the gear is not damaged.
(The damage gear emits noise during searching.)

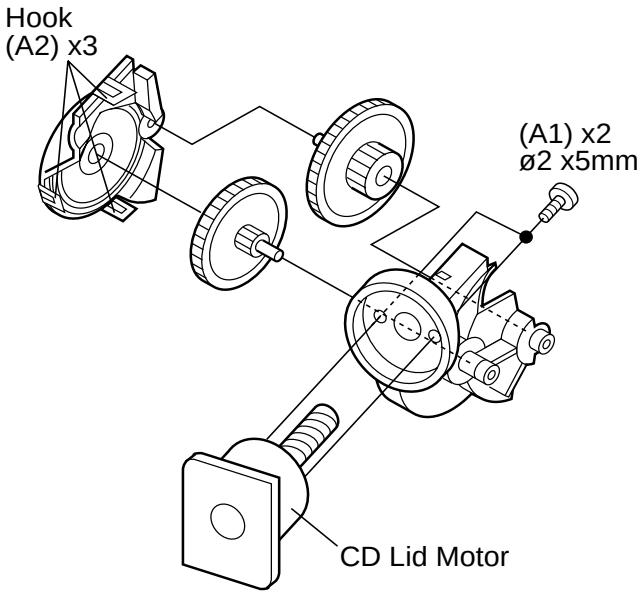


Figure 11-2

CD MECHANISM SECTION (See Fig. 11-3.)

Perform steps 1 and 6 of the disassembly method to remove the CD mechanism.(See page 8,9)

1. Remove the mechanism cover, paying attention to the pawls (A1)x 4 pcs.
2. Remove the screws (A2) x 2 pcs., to remove the shaft (A3) x 1 pc.
3. Remove the stop washer (A4) x 1 pc., to remove the gear (A5) x 1 pc.
4. Remove the pickup unit.

Note:

After removing the connector for the optical pickup from the connector, wrap the conductive aluminium foil around the front end of connector remove to pretect the optical pickup from electrostatic damage.

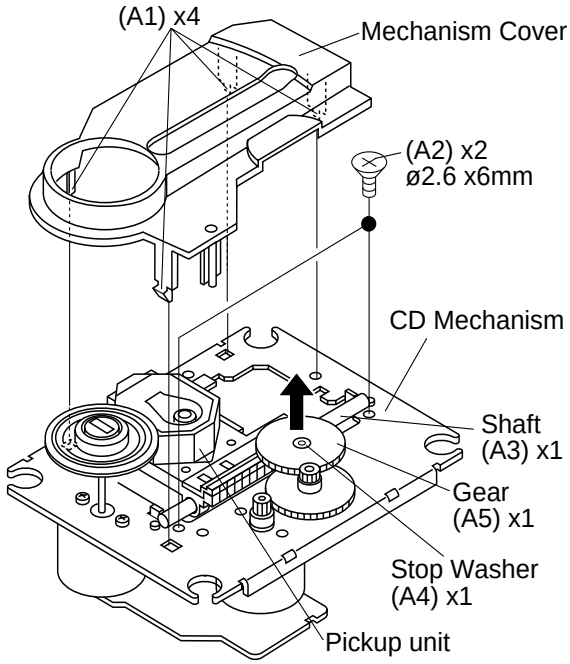


Figure 11-3

ADJUSTMENT

MECHANISM SECTION

• Driving Force Check

Torque Meter	Specified Value
Play: TW-2412	Over 80 g

• Torque Check

Torque Meter	Specified Value
Play: TW-2111	30 to 60 g. cm
Fast forward: TW-2231	55 to 140 g.cm
Rewind: TW-2231	55 to 140 g.cm

• Tape Speed

Test Tape	Adjusting Point	Specified Value	Instrument Connection
MTT-111	Variable resistor in motor.(M901)	3,000 ± 90 Hz	Headphone terminal

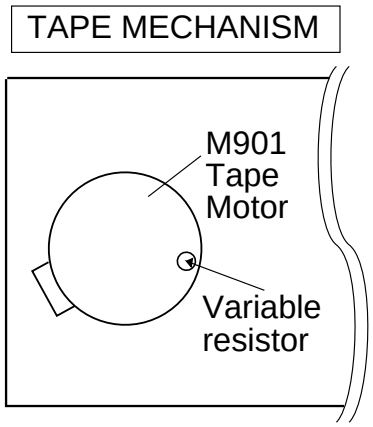


Figure 12-1 ADJUSTMENT POINTS

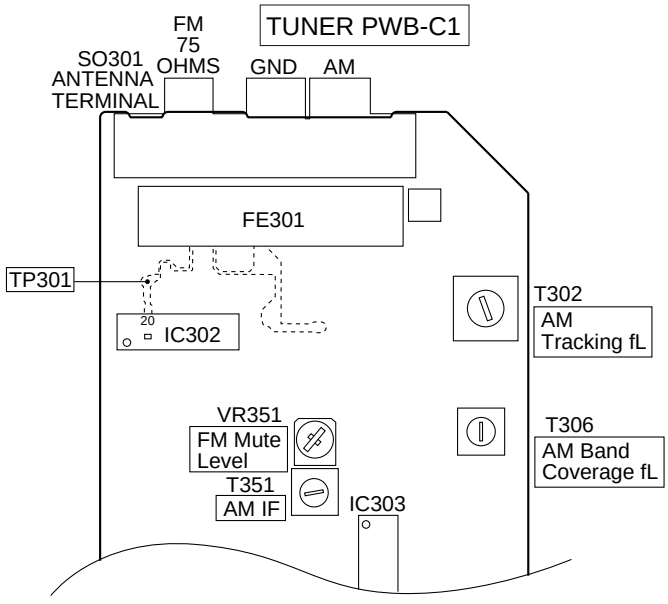


Figure 12-2 ADJUSTMENT POINTS

TUNER SECTION

fL: Low-range frequency
fH: High-range frequency

• AM IF/RF

Signal generator: 400 Hz, 30%, AM modulated

Frequency	Frequency	Display	Setting/ Adjusting Parts	Instrument Connection
AM IF	450 kHz	1,620 kHz	T351	*1
AM Band Coverage	—	522 kHz	(fL): T306 1.1 ± 0.1 V	*2
AM Tracking	990 kHz	990 kHz	(fL): T302	*1

*1. Input: Antenna, Output: Speaker Terminal
*2. Input: Input is not connected, Output: TP301

• Setting the Test Mode

Keeping the FF/FWD button and MEMORY/SET button pressed, turn on ON/STAND-BY. Then, the frequency is initially set in the memory as shown in Table. Call it with the VOLUME UP/DOWN button to use it for adjustment and check of tuner circuit.

Preset No.	FM	Preset No.	AM
1	87.50 MHz	6	522 kHz
2	108.00 MHz	7	1,620 kHz
3	98.00 MHz	8	990 kHz
4	90.00 MHz	9	603 kHz
5	106.00 MHz	10	1,404 kHz

• FM Mute Level

Signal generator: 1 kHz, 40 kHz dev., FM modulated

Frequency	Display	Adjusting Parts	Instrument Connection
98.00 MHz (30 dBμV)	98.00 MHz	VR351*1	Input: SO301 Output: Speaker Terminal

*1. Adjust so that an output signal appears.

• Check FM VT

Signal generator: 1 kHz, 40 kHz dev., FM modulated

Frequency	Display	Check Point	Instrument Connection
87.5 MHz	87.5 MHz	2.2 V ± 0.7 V	TP301
108 MHz	108 MHz	7.3 V ± 1.0 V	TP301

TEST MODE

The test mode applied to this microcomputer has three modes, namely the ordinary test mode for adjustment or measurement, the aging test mode, and the self-diagnosis test mode for self-judgment in case of final product inspection.

1. Turning on the test mode

For obtaining each test mode, press the ON/STAND-BY button, while keeping pressing the following two buttons in the ordinary stand-by mode (power off). In this case, the main unit buttons are valid. When turning the ON/STAND-BY on with remote control buttons, test modes are not obtained.

[Ordinary test mode]

1. CD Test Mode (TEST 01) ..... VOLUME DOWN + STOP
2. Tuner Test Mode (TEST 02) ..... VOLUME DOWN + MEMORY
3. Electronic Volume Test Mode (TEST 03) ..... VOLUME DOWN + REC
4. Timer Test Mode (TEST 04) ..... VOLUME UP + STOP
5. LCD Test Mode (TEST 05) ..... VOLUME UP + REC
6. Electric CD Lid Aging Test Mode (TEST 08) ..... VOLUME UP + MEMORY

[Self-diagnosis Test Mode]

1. Button input diagnosis test mode (TEST06)……..VOLUME UP + PLAY

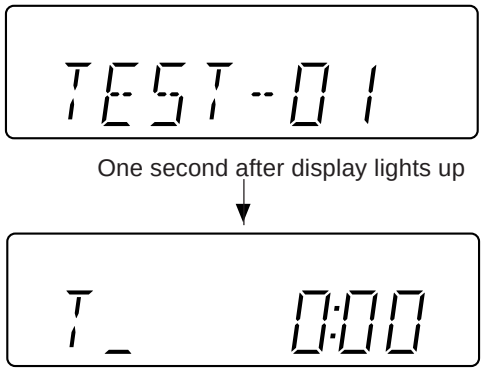
Processes are different depending on destinations at initial settings.

2. CD Test Mode (TEST 01)

In the CD test mode the operation of each step is possible even if the LID-SW is off. If focus cannot be taken in step 3 or any error is processed, it is impossible to proceed to the next step. During error processing, end the test mode by pressing the ON/STAND-BY button or return to the step 1 by pressing the CD STOP button. Any other operations are inhibited.

1. Step 1 Mode

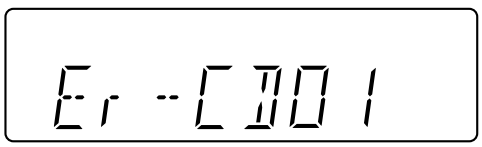
When the CD test mode is obtained, the following display lights up. Then CD initialization operation flow proceeds up to CD STB off to wait for the following buttons to be pressed.



Press the following buttons in this state to obtain the operations specified below.

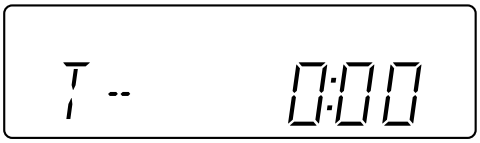
"ON/STAND-BY" ..... Test mode and power turned off to shift to the ordinary standby mode.
"FF/FWD" ..... After the pickup returns to the innermost periphery, it slides toward the outer periphery while this button is pressed.
"REW/REV" ..... After the pickup returns to the innermost periphery, it slides toward the inner periphery while this button is pressed. If PICKUP IN is on, input is invalid.
"PLAY" ..... Shift to step 2
"STOP" ..... Invalid
"FUNCTION" ..... Shift to step 5

* In case of initialization, the pickup is moved toward the inner periphery. Any buttons other than "ON/STAND-BY" button are not accepted until the shift of pickup to the inner periphery is completed at this time. If PICKUP IN SW ON cannot be detected within 10 seconds, the slide motor stops, and the following error display appears. Press the ON/STAND-BY button to end the test mode, or press the CD STOP button to return to step 1. Any other operations are inhibited.



2. Step 2 Mode

Press the "CD PLAY" button in this mode to transmit the laser lighting command LDON (8400) and turn on the laser. Any other operations are not performed in this case.

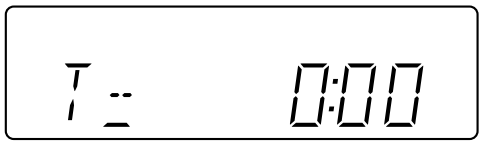


Press the following buttons in this state to obtain the operations specified below.

"ON/STAND-BY" ..... Test mode and power turned off to shift to the ordinary standby mode.
"FF/FWD" ..... The pickup slides toward the outer periphery while this button is pressed.
"REW/REV" ..... The pickup slides toward the inner periphery while this button is pressed. If PICKUP IN is on, input is invalid.
"PLAY" ..... Shift to step 3
"STOP" ..... Return to step 1
"FUNCTION" ..... Shift to step 5

3. Step 3 Mode

While the laser keeps lighting, CD initialization operation flow proceeds up to 'CLV servo ON' to wait for the following buttons to be pressed.(Focus servo turned on for focus search)
The focus search is repeated to take focus.

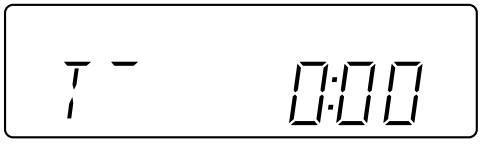


Press the following buttons in this state to obtain the operations specified below.

"ON/STAND-BY" ..... Test mode and power turned off to shift to the ordinary standby mode.
"FF/FWD" ..... The pickup slides toward the outer periphery while this button is pressed.
"REW/REV" ..... The pickup slides toward the inner periphery while this button is pressed. If PICKUP IN is on, input is invalid.
"PLAY" ..... If focus has been taken, shift to step 4 is executed. If not, acceptance is inhibited.
"STOP" ..... Return to step 1
"FUNCTION" ..... Shift to step 5
*If the focus is not received after it has been taken, the process returns to step 1.

4. Step 4 Mode

The CLV servo ON command (8600) is transmitted to wait for the following buttons to be pressed. (The disc is rotated for CLV lock.)



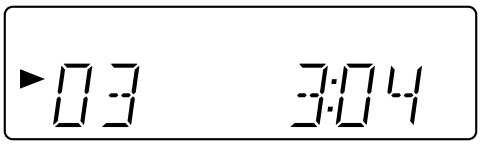
The time display always indicates "0:00".

Press the following buttons in this state to obtain the operations specified below.

"ON/STAND-BY" ..... Test mode and power turned off to shift to the ordinary standby mode.
"FF/FWD" ..... The pickup slides toward the outer periphery while this button is pressed.
"REW/REV" ..... The pickup slides toward the inner periphery while this button is pressed. If PICKUP IN is on, input is invalid.
"PLAY" ..... Shift to step 5
"STOP" ..... Return to step 1
"FUNCTION" ..... Shift to step 5
*If the focus is not received, the process returns to step 1.

5. Step 5 Mode

When the CD initialization operation flow is completed, the mute is turned off, and playback is started. Even if playback reaches the outermost periphery of disc, the operation does not stop. The LCD display indicates the playback passage time as in case of ordinary CD playback.



Press the following buttons in this state to obtain the operations specified below.

"ON/STAND-BY" ..... Test mode and power turned off to shift to the ordinary standby mode.
"FF/FWD" ..... The pickup slides toward the outer periphery while this button is pressed.
"REW/REV" ..... The pickup slides toward the inner periphery while this button is pressed. If PICKUP IN is on, input is invalid.
"PLAY" ..... Invalid
"STOP" ..... Return to step 1
"FUNCTION" ..... Shift to step 6
"MEMORY" ..... Shift to step 7
*If the is not received, the process returns to step 1.

Other cautions
• TOC IL is not available for this test mode.

6. Step 6 Mode

Press the FUNCTION button during step 5 operation to set EC/FC bit to "H" by PROSET command (9188 transmission) and to monitor BUS2 (QDRE) during idle mode. The number of errors for 1 frame (1 sub-code block in IC data) is read by read command SRC6 during "H". The number of errors accumulated in 750 frames for 10 seconds is displayed on LCD. During the display, music signal is played back.

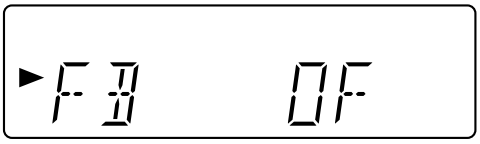
Press the following buttons in this state to obtain the operations specified below.

"ON/STAND-BY" ..... Test mode and power turned off to shift to the ordinary standby mode.
"FF/FWD" ..... The pickup slides toward the outer periphery while this button is pressed.
"REW/REV" ..... The pickup slides toward the inner periphery while this button is pressed. If PICKUP IN is on, input is invalid.
"PLAY" ..... Invalid
"STOP" ..... Return to step 1
"FUNCTION" ..... Shift to step 5
"MEMORY" ..... Shift to step 7

Press FF/PRESET UP or REW/PRESET DOWN button to slide the pickup. The number of errors accumulated up to that time is cleared and addition is restarted after shift.
*If the focus is not received, the process returns to step 1.

7. Step 7 Mode

Press "MEMORY" key during step 6 operation to display automatically adjusted values on LCD in the order as below. Item names are displayed by left alignment, and adjusted values by right alignment in hexadecimal numbers. Operations other than display are as same as those for step 5.



a) "Fb" is displayed on the left of LCD. FTBAST command (D480) is transmitted to designate focus balance adjusting register. Then data read by read command SRC2 (2) are displayed in hexadecimal numbers. After waiting 2 seconds, operation is shifted to (b).
b) "FG" is displayed on the left of LCD. FTBAST command (D481) is transmitted to designate focus gain adjusting register. Then data read by read command SRC2 (2) are displayed in hexadecimal numbers. The upper two bits, which are invalid, are displayed as "00". After waiting two seconds, operation is shifted to (c).
c) "Tb" is displayed on the left of LCD. FTBAST command (D482) is transmitted to designate tracking balance adjusting register. Then data read by read command SRC2 (2) are displayed in hexadecimal numbers. After waiting 2 seconds, operation is shifted to (d).
d) "TG" is displayed on the left of LCD. FTBAST command (D483) is transmitted to designate tracking gain adjusting register. Then data read by read command SRC2 (2) are displayed in hexadecimal numbers. The upper two bits, which are invalid, are displayed as "00". After waiting 2 seconds, operation is shifted to (e).
e) "FO" is displayed on the left of LCD. FTBAST command (D484) is transmitted to designate focus offset adjusting register. Then data read by read command SRC2 (2) are displayed in hexadecimal numbers. After waiting 2 seconds, operation is shifted to (f).
f) "TO" is displayed on the left of LCD. FTBAST command (D485) is transmitted to designate tracking offset adjusting register. Then data read by read command SRC2 (2) are displayed in hexadecimal numbers. After waiting 2 seconds, operation is shifted to (g).
g) "FF" is displayed on the left of LCD. FTBAST command (D486) is transmitted to designate RF amplitude adjusting register. Then data read by read command SRC2 (2) are displayed in hexadecimal numbers. After waiting 2 seconds, operation is shifted to (a).

Press the following buttons in this state to obtain the operations specified below.

"ON/STAND-BY" ..... Test mode and power turned off to shift to the ordinary standby mode.
"FF/FWD" ..... The pickup slides toward the outer periphery while this button is pressed.
"REW/REV" ..... The pickup slides toward the inner periphery while this button is pressed. If PICKUP IN is on, input is invalid.
"PLAY" ..... Invalid
"STOP" ..... Return to step 1
"FUNCTION" ..... Shift to step 6
"MEMORY" ..... Shift to step 5
*If the focus is not received, the process returns to step 1.

3. Tuner Test Mode (TEST 02)

1. Outline of tuner (radio) test mode

The tuner test mode is intended to store the adjustment and measurement frequencies in the preset memory CH. When adjusting the tuner section in the production line, adjusting personnel are not required to set frequency.

2. Details of tuner test mode

Press the "REW/PRESET DOWN" and "CD PLAY" buttons in POWER OFF state and turn on the power by the use of "ON/STAND-BY" button to preset and store frequency for adjustment and measurement of destination specified by the AREA terminal in the preset memory CH. However, Ordinary 1 and Ordinary 2 are stored in the destinations (selected by SPAN switching operation) when the test mode is obtained.

("FF⏭" + "MEMORY/SET" KEY SPAN CHANGE)

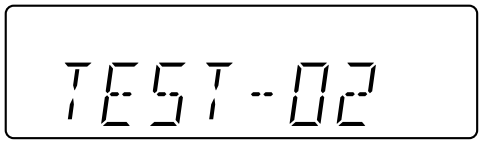
(As for frequencies to be preset and stored for each destination, refer to item 3.)

The tuner test mode is started from preset No.1.

The operations of test mode are identical with the ordinary operations of TUNER function. FUNCTION switching is invalid.

It is necessary to discard the content of preset memory when the tuner test mode is ended; be sure to write "0000" or "1111" bits in the memory to be checked for judging memory error at initial setting and to initialize memory.

When the tuner test mode is obtained, the following display lights for one second.



• The TUNER TEST02 mode is obtained with >> + MEMORY + ON/STAND-BY. ->Turn off AC in the TEST02 mode to restore the initial state.

↓

Turn off POWER to protect the memory of TEST02 mode.
Turn off POWER again to obtain the ordinary operation while the data is stored in the memory (besides TUNER).

↓

If AC OFF state is maintained in this state for about 1/2 day, start is executed in the initial state.

• To clear the whole memory, insert the AC cord, pressing MEMORY + CD PLAY.

3. Preset frequencies for various destinations (random preset memory)

CH	BAND	FM
1		FM 87.50 MHz
2		FM108.00 MHz
3	FM	FM 98.00 MHz
4	STEREO	FM 90.00 MHz
5		FM106.00 MHz

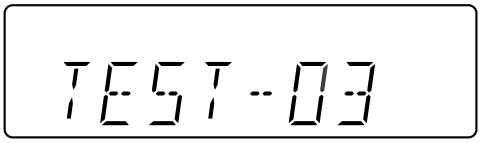
CH	BAND	AM
6		AM 522 kHz
7		AM1620 kHz
8	AM	AM 990 kHz
9		AM 603 kHz
10		AM1404 kHz

CH	BAND	FM
16-25		
26		FM106.00 MHz
27		FM 90.00 MHz
28	FM	FM 98.00 MHz
29	MONO	FM108.00 MHz
30		FM 87.50 MHz

• The slant line sections of the table store no memory.

4. Electronic volume Test Mode (TEST 03)

When this test mode is obtained, the following display lights for one second.



In this mode, volume is -14 dB (STEP28), BASS/TREBLE is set to 0 (0 dB) and SURROUND mode to OFF, and start-up function to CD, respectively. The button operations in the test mode are the same as those of ordinary operation except volume UP/DOWN.

(1) The display is the same as that of ordinary operation except test mode setting.

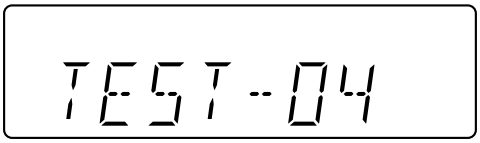
(2) Unlike the ordinary state, the volume is controlled with the volume UP/DOWN button in accordance with the following three steps.

Volume- ∞ (STEP 0) <-> Volume-14 dB (STEP 23) <-> Volume-0 (STEP 30)

(3) BASS/TREBLE and SURROUND are switched when button is pressed..

5. Timer test Mode (TEST 04)

When this test mode is obtained, the following display lights for one second.

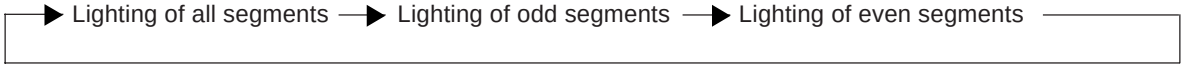


Set the current time and timer time according to the following procedure to reproduce the timer.

1.Set the current time to 1:00, the timer to ON time 1:05, the function to CD, and volume to STEP 12, respectively. One minute is counted as one second, and the timer is reproduced. The fade-in (when playback is started) is executed at a rate of one step for 1 sec. After completion of fade-in, the fade-out is executed at a rate of one step for 1 sec (WAIT 1 sec inserted). After completion of fade-out, the power is turned off (after WAIT 1 sec), and the mode is shifted to the standby. The display during operation is the same as that of ordinary timer operation.

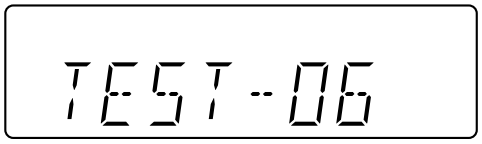
6. LCD Test Mode (TEST 05)

When the LCD test mode is obtained, all the LCD segments are lighted. Then pressing the "PLAY" button switches display as below.



7. Button input diagnosis Test Mode (TEST 06)

When the test mode is obtained, the following is displayed.



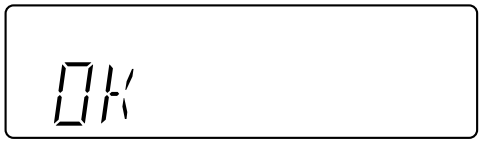
This test mode is intended to check whether all the main unit buttons can be detected. Accordingly, in this test mode, it is checked whether the "ON/STAND-BY" button was pressed after all the buttons shown below were pressed. If the result is OK, OK is displayed. If any one of keys was not pressed, an error is displayed. In both cases of OK termination or error termination, the mode is shifted to the standby mode if the "ON/STAND-BY" button is pressed subsequently.

All models using this type of microcomputer are not always provided with the same buttons. Since the buttons used are different depending on models, types of buttons to be used are determined by whether RDS, SURROUND, and an electric lid are available at the initial setting by MODEL port.

The order of buttons to be pressed is not determined. Accordingly, it is checked whether all buttons have been pressed.

1. PU-IN buttons: REW/PRESET DOWN + CD STOP
   Since this model is provided with SURROUND (HAVE OR NOT), RDS (HAVE OR NOT), and electric CD lid, the following 10 buttons are detected as all buttons.
   PLAY, BASS/TREBLE, FUNCTION, VOLUME UP/DOWN, MEMORY/SET, REW, FF, STOP, CD-OPEN/CLOSE

The OK/NG display of test result is as follows.



8. Electric CD lid Aging Test Mode (TEST 08) (Only for model with electric CD lid)

Outline

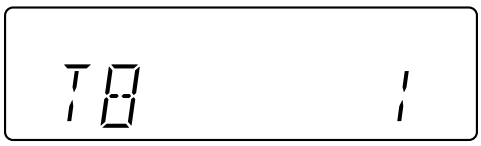
OPEN/CLOSE operations of electric CD lid are repeated. The number of repeated times and time period are monitored. If the lid does not move to the regular position after the specified time, operation is stopped. When an error is detected by [CLID_PRO] during CLOSE, operation is also stopped.

a. POWER ON for function AUX
   CD lid position is checked.
   - CLOSE position: Operation proceeds to the next process.
   - Position other than CLOSE: After the lid moves to CLOSE, operation proceeds to the next process.

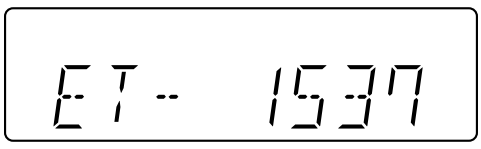
b. CD lid operation started
   OPEN operation
   - WAIT 1 second
   - CLOSE operation
   - WAIT 1 second

c. Operations above are repeated.
   Specified monitoring time
   - OPEN operation: 5 seconds
   - CLOSE operation: 5 seconds

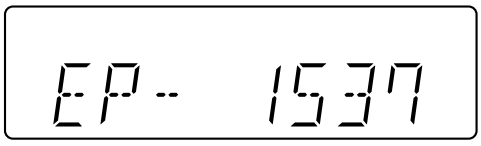
d. Display
   OPEN>CLOSE is counted as 1. 1 to 59999 are counted; if the count is over 59999, display is returned to 0 to repeat counting.



Display when the lid does not move to the regular position after the specified time
(Ex: Defective operation occurring in the middle of 1538.)



Highlight display of stop when an error is detected by [CLID-PRO]
(Ex: Defective operation occurring in the middle of 1538.)



NOTES ON SCHEMATIC DIAGRAM

- Resistor:
  To differentiate the units of resistors, such symbol as K and M are used: the symbol K means 1000 ohm and the symbol M means 1000 kohm and the resistor without any symbol is ohm-type resistor. Besides, the one with “Fusible” is a fuse type.
- Capacitor:
  To indicate the unit of capacitor, a symbol P is used: this symbol P means micro-micro-farad and the unit of the capacitor without such a symbol is microfarad. As to electrolytic capacitor, the expression “capacitance/withstand voltage” is used.
  (CH), (TH), (RH), (UJ): Temperature compensation
  (ML): Mylar type
  (P.P.): Polypropylene type
- Schematic diagram and Wiring Side of P.W.Board for this model are subject to change for improvement without prior notice.
- The indicated voltage in each section is the one measured by Digital Multimeter between such a section and the chassis with no signal given.
  1. In the tuner section,
     ( ) : AM mode
     : FM stereo mode
  2. In the CD section, the CD is stopped.
- Parts marked with “⚠” (⊏ 二 二 二 ⊐) are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

REF. NO	DESCRIPTION	POSITION
SW702	PICKUP IN	ON—OFF
SW709	ON/STAND-BY	ON—OFF
SW710	CD LID OPEN/CLOSE	ON—OFF
SW711	VOLUME DOWN	ON—OFF
SW712	VOLUME UP	ON—OFF
SW721	FUNCTION	ON—OFF
SW722	REW/PRESET DOWN	ON—OFF
SW723	FF/PRESET UP	ON—OFF

REF. NO	DESCRIPTION	POSITION
SW724	BASS/TREBLE	ON—OFF
SW725	CD STOP/CLEAR/TUNING DOWN	ON—OFF
SW726	MEMORY/SET	ON—OFF
SW727	CD PLAY/PAUSE/TUNING UP	ON—OFF
SW728	REC/PAUSE	ON—OFF
SW802	CD LID	ON—OFF
SW901	FOOL PROOF	ON—OFF
SW902	CAM	ON—OFF

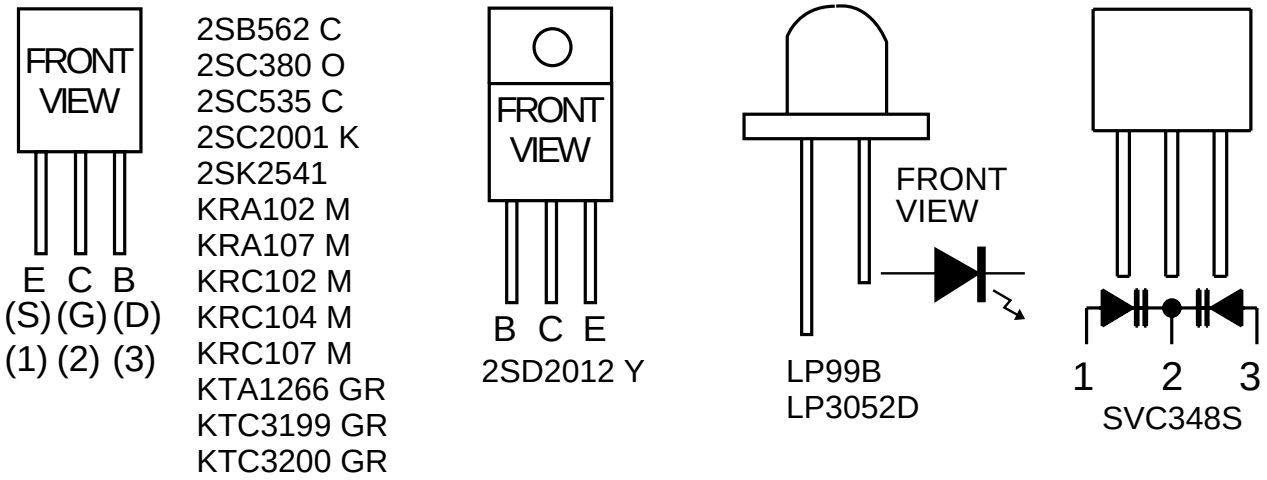


Figure 20 TYPES OF TRANSISTOR AND LED

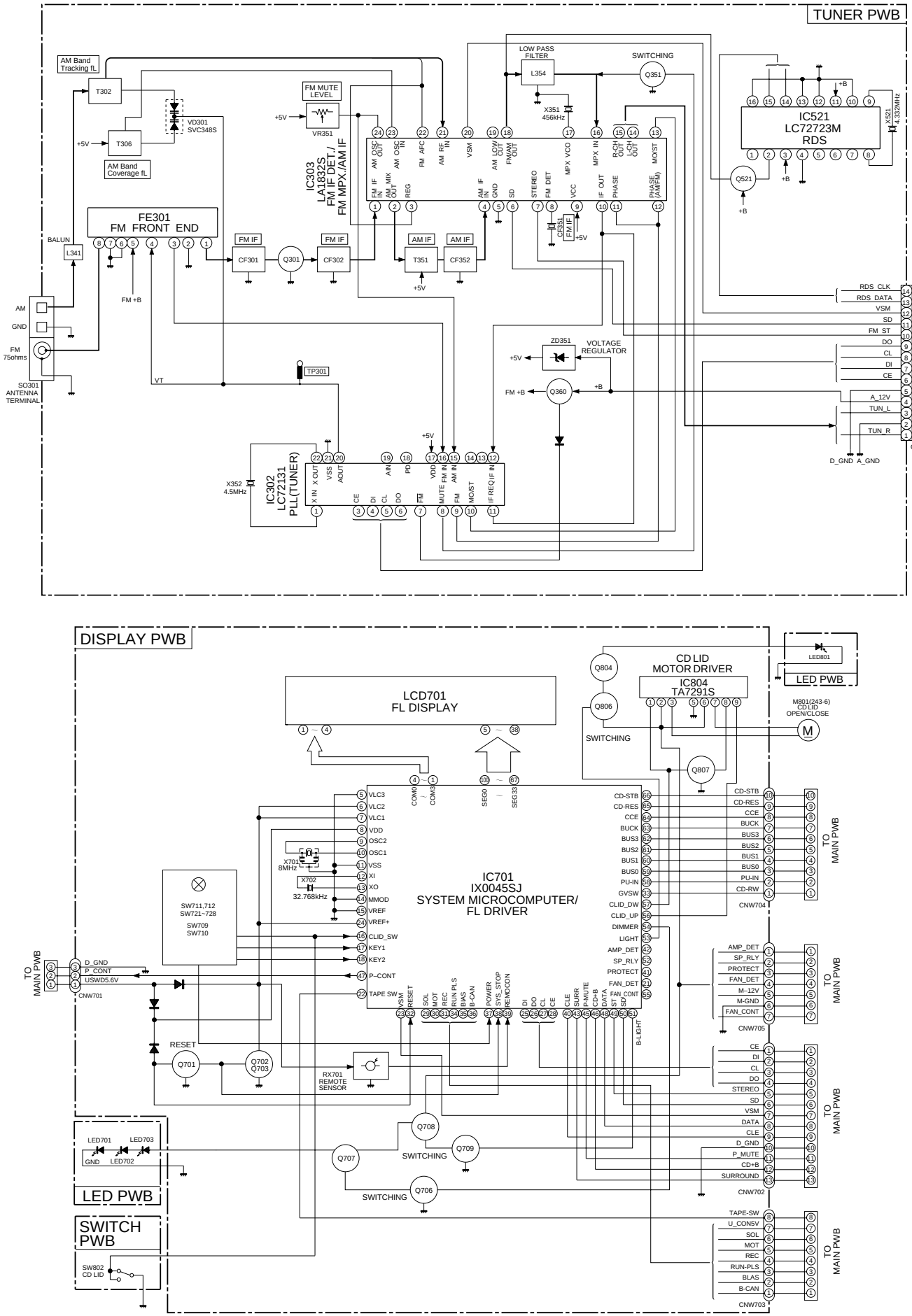


Figure 21 BLOCK DIAGRAM (1/3)

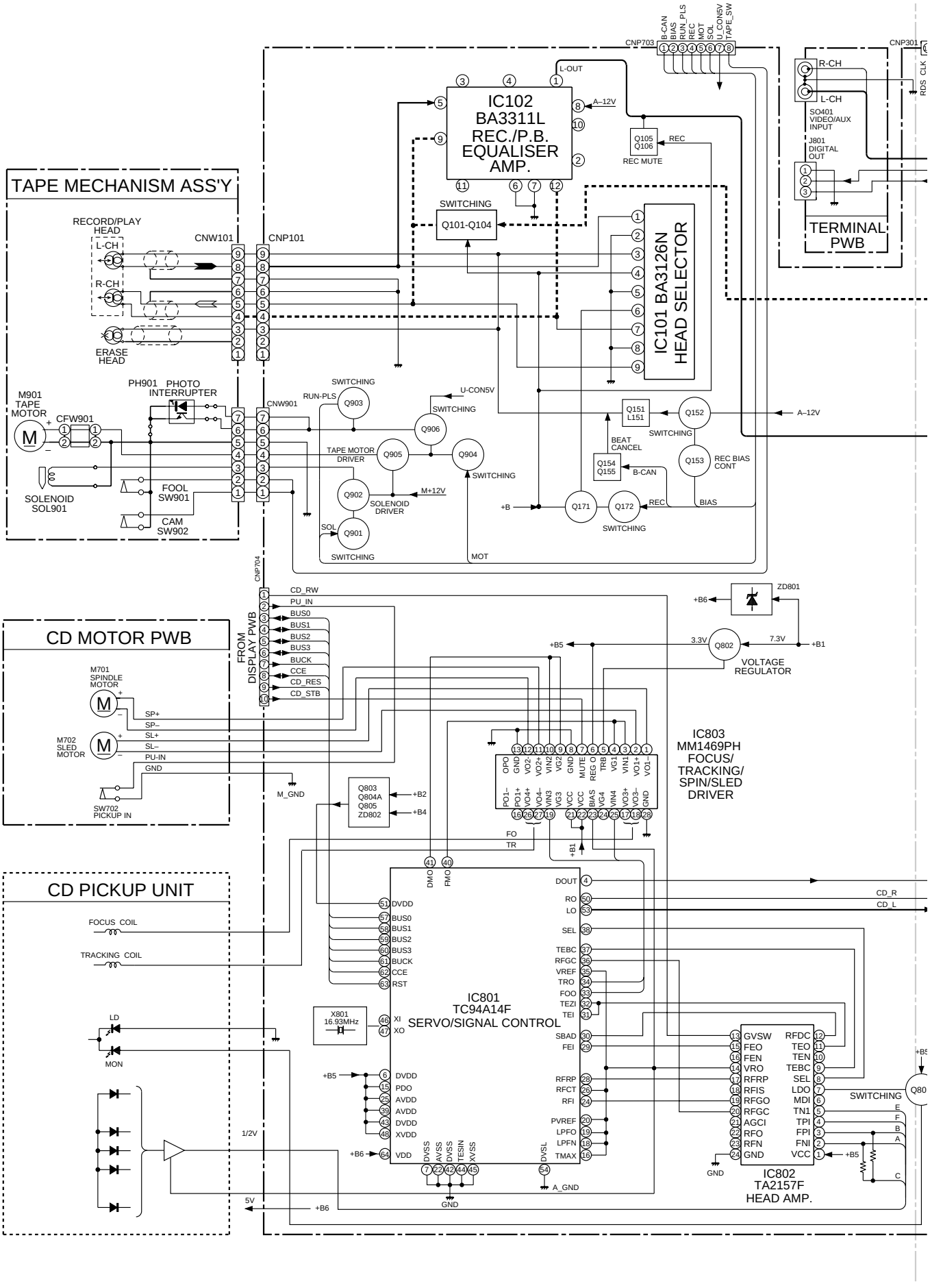


Figure 22 BLOCK DIAGRAM (2/3)

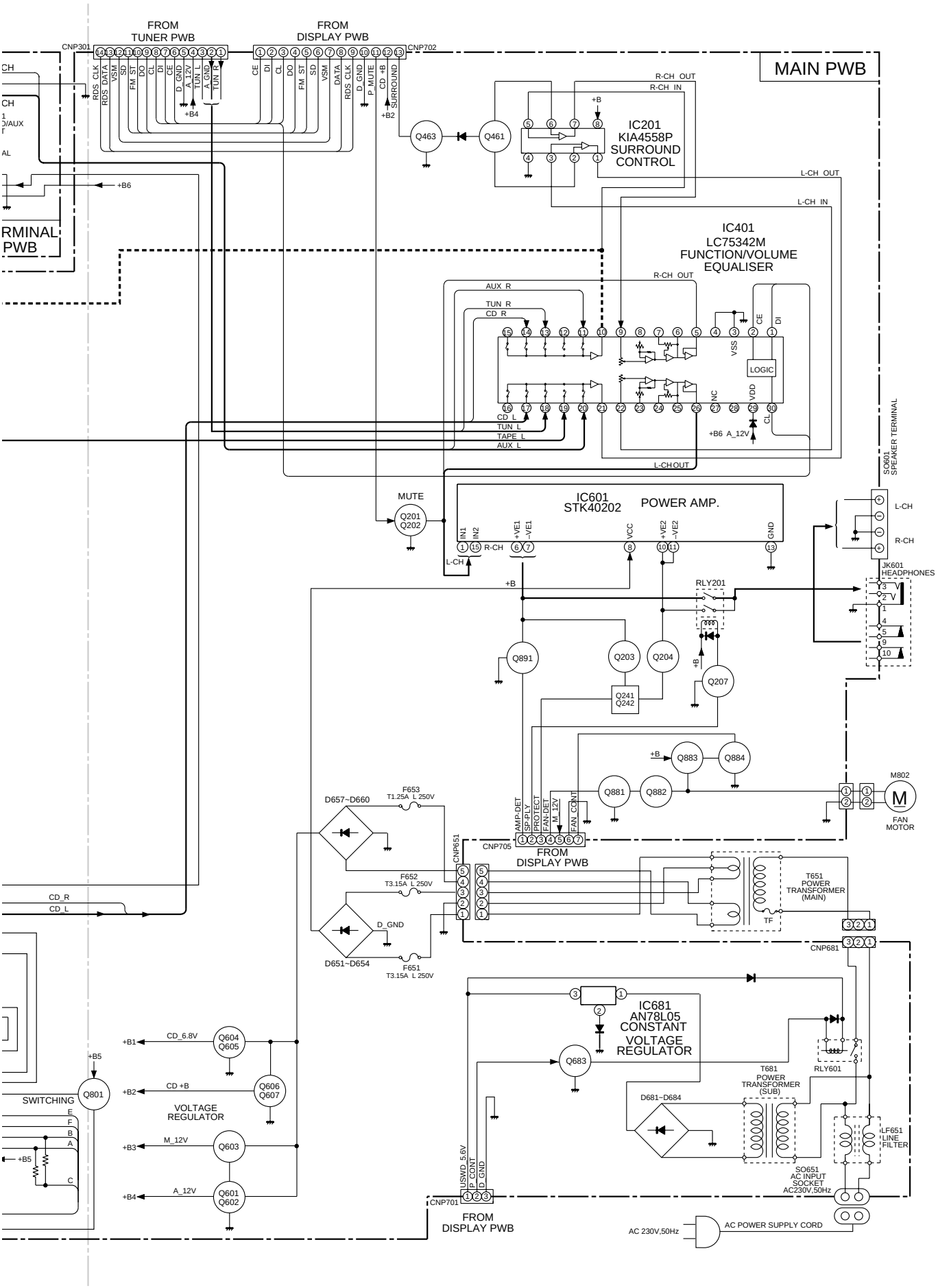
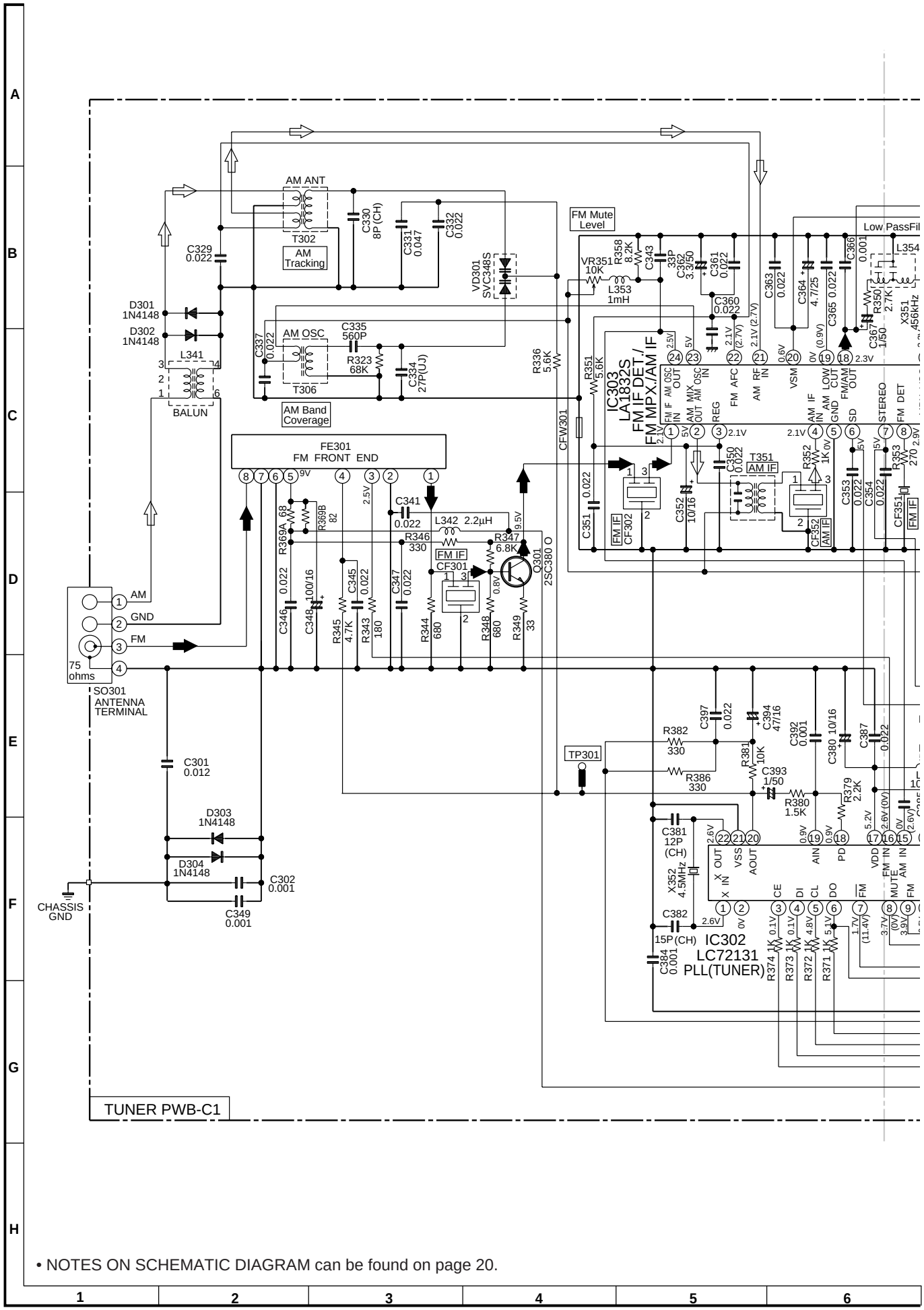
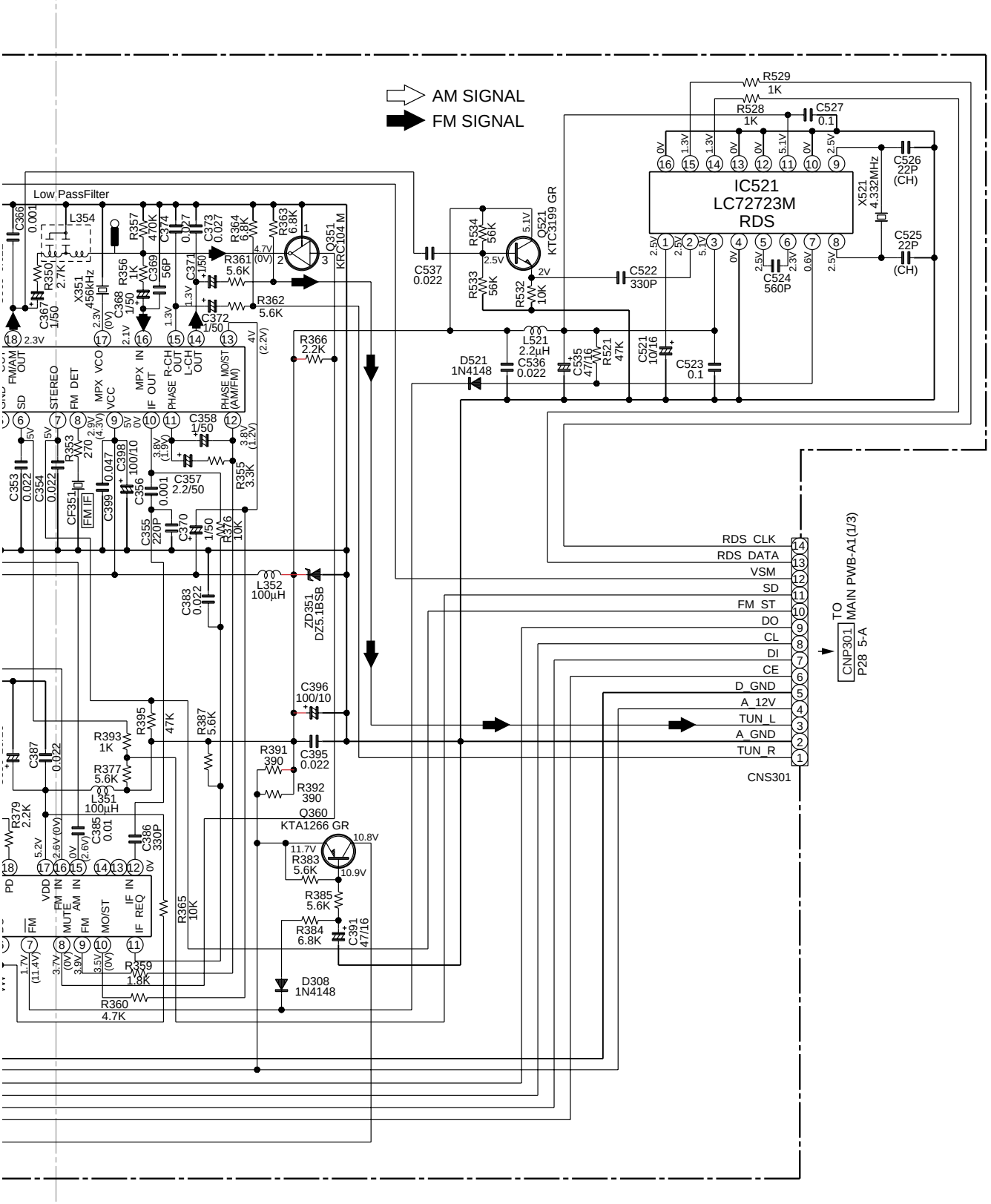


Figure 23 BLOCK DIAGRAM (3/3)



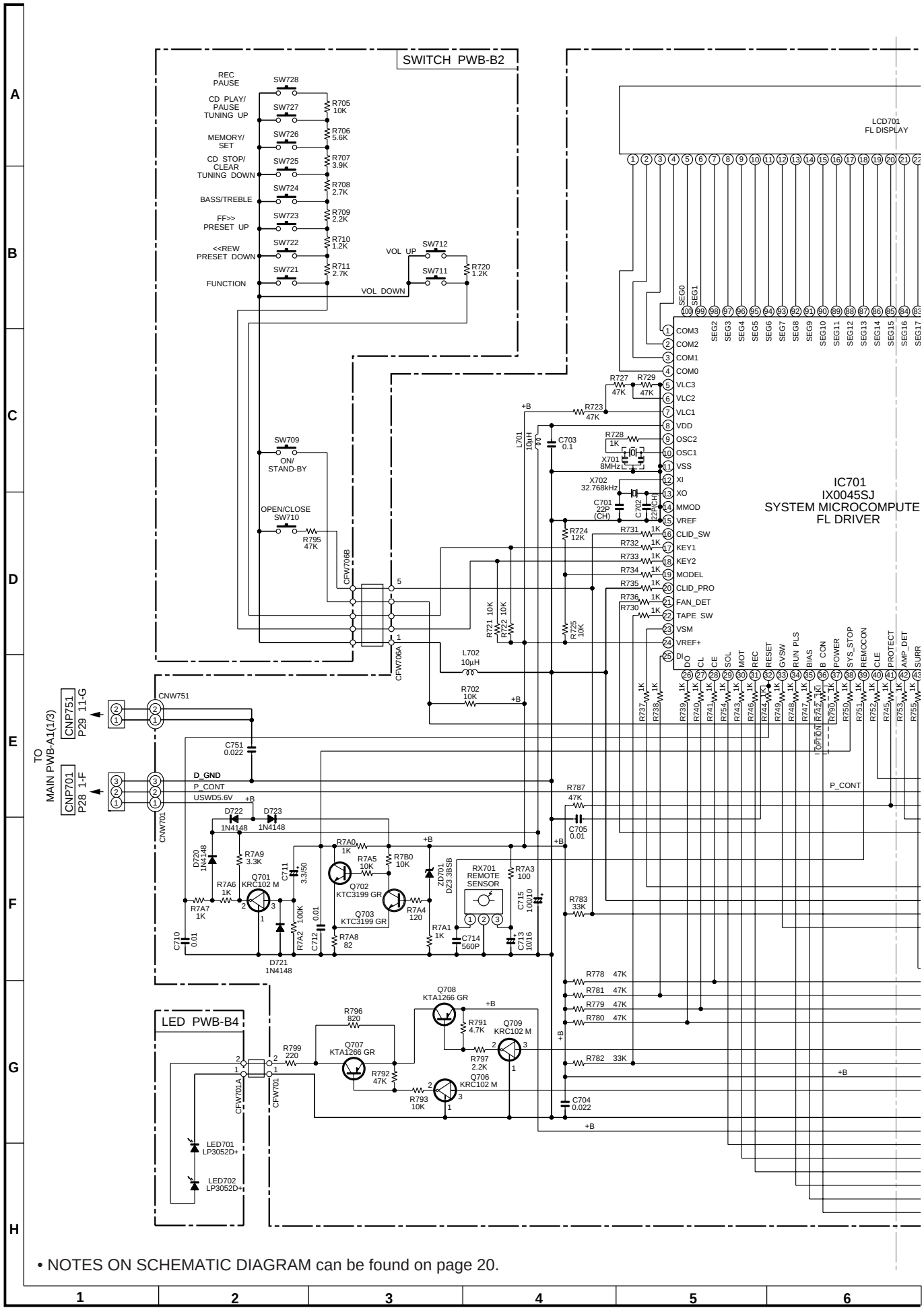
• NOTES ON SCHEMATIC DIAGRAM can be found on page 20.

Figure 24 SCHEMATIC DIAGRAM (1/10)



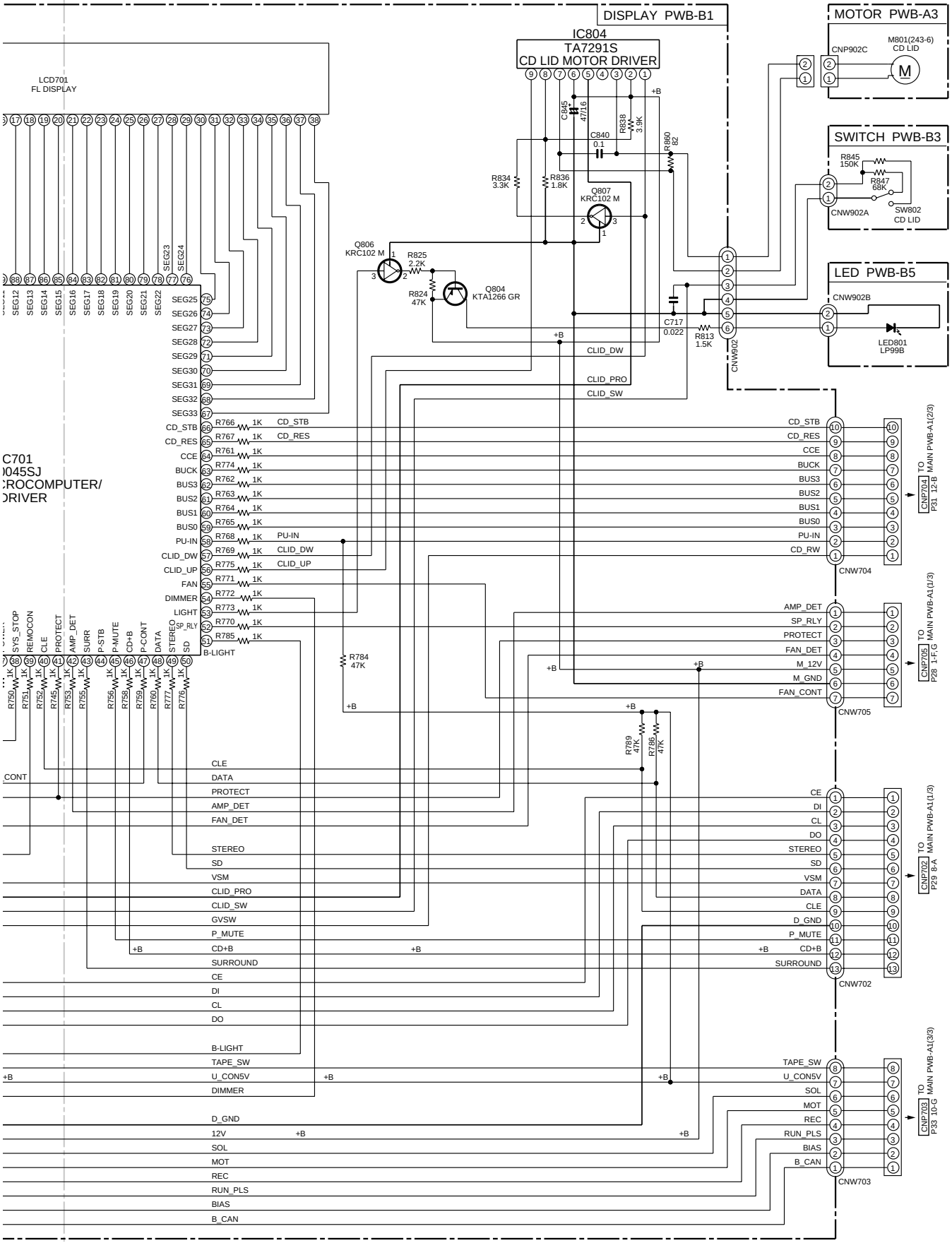
7	8	9	10	11	12

Figure 25 SCHEMATIC DIAGRAM (2/10)



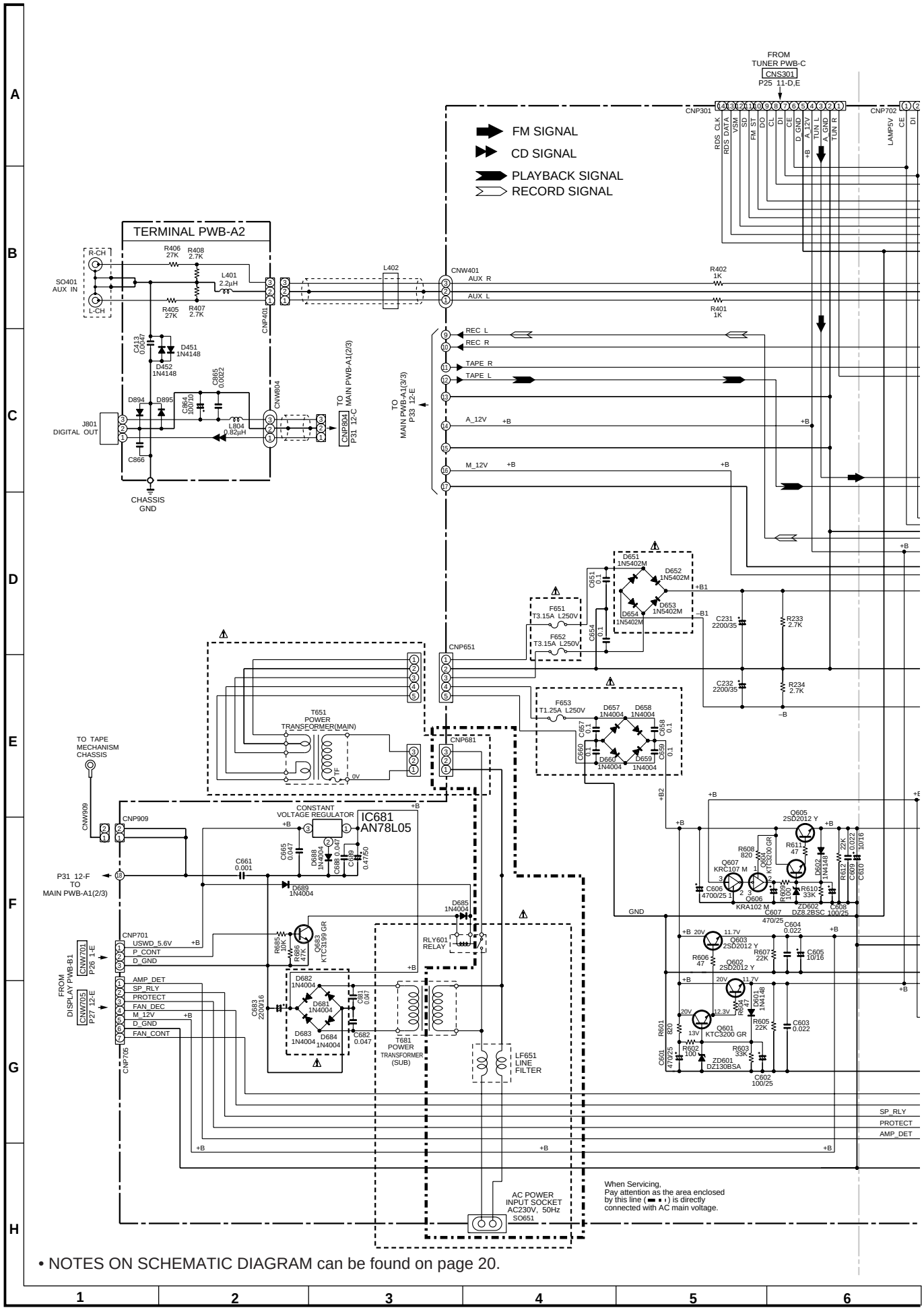
• NOTES ON SCHEMATIC DIAGRAM can be found on page 20.

Figure 26 SCHEMATIC DIAGRAM (3/10)



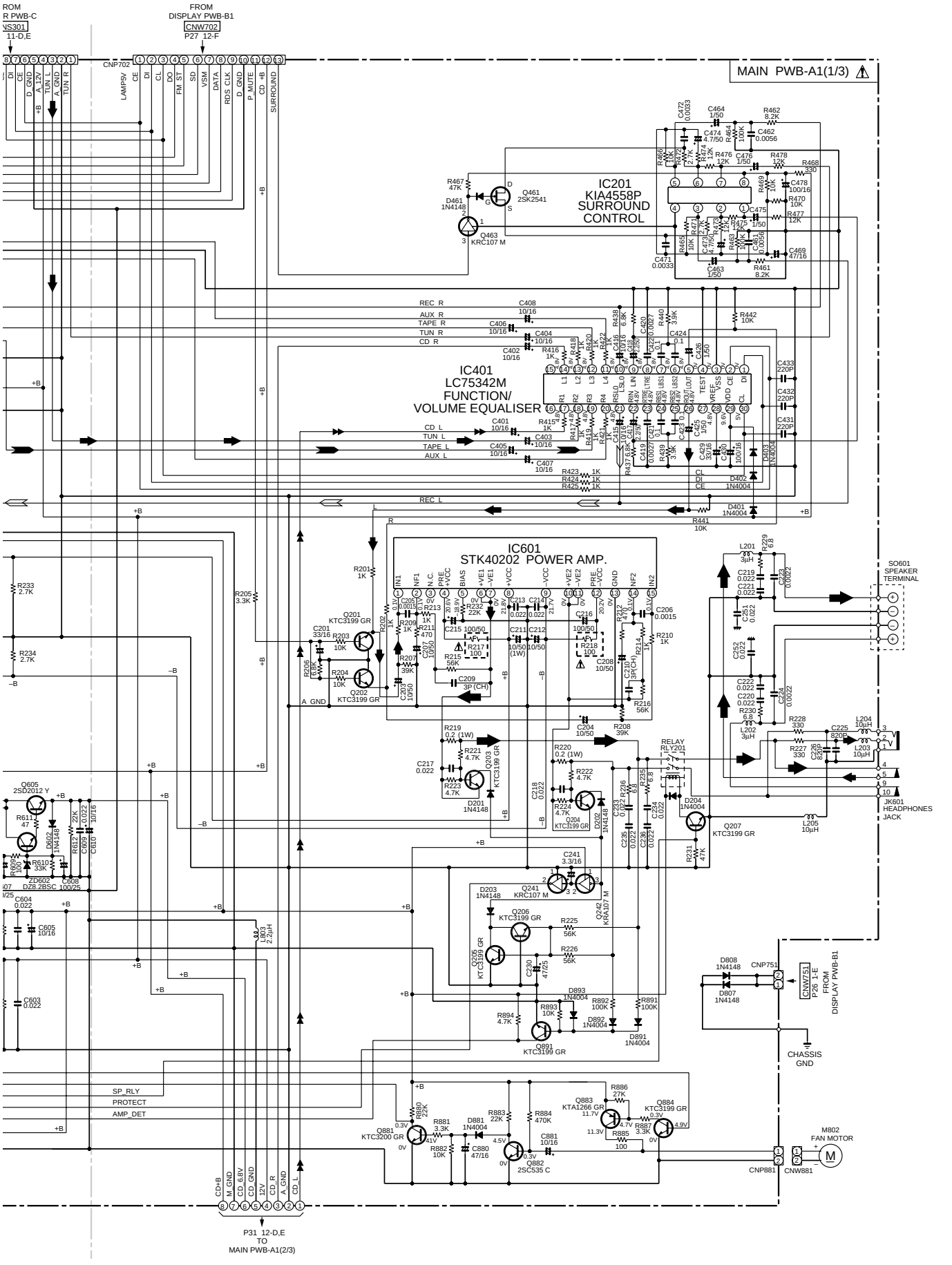
7	8	9	10	11	12

Figure 27 SCHEMATIC DIAGRAM (4/10)



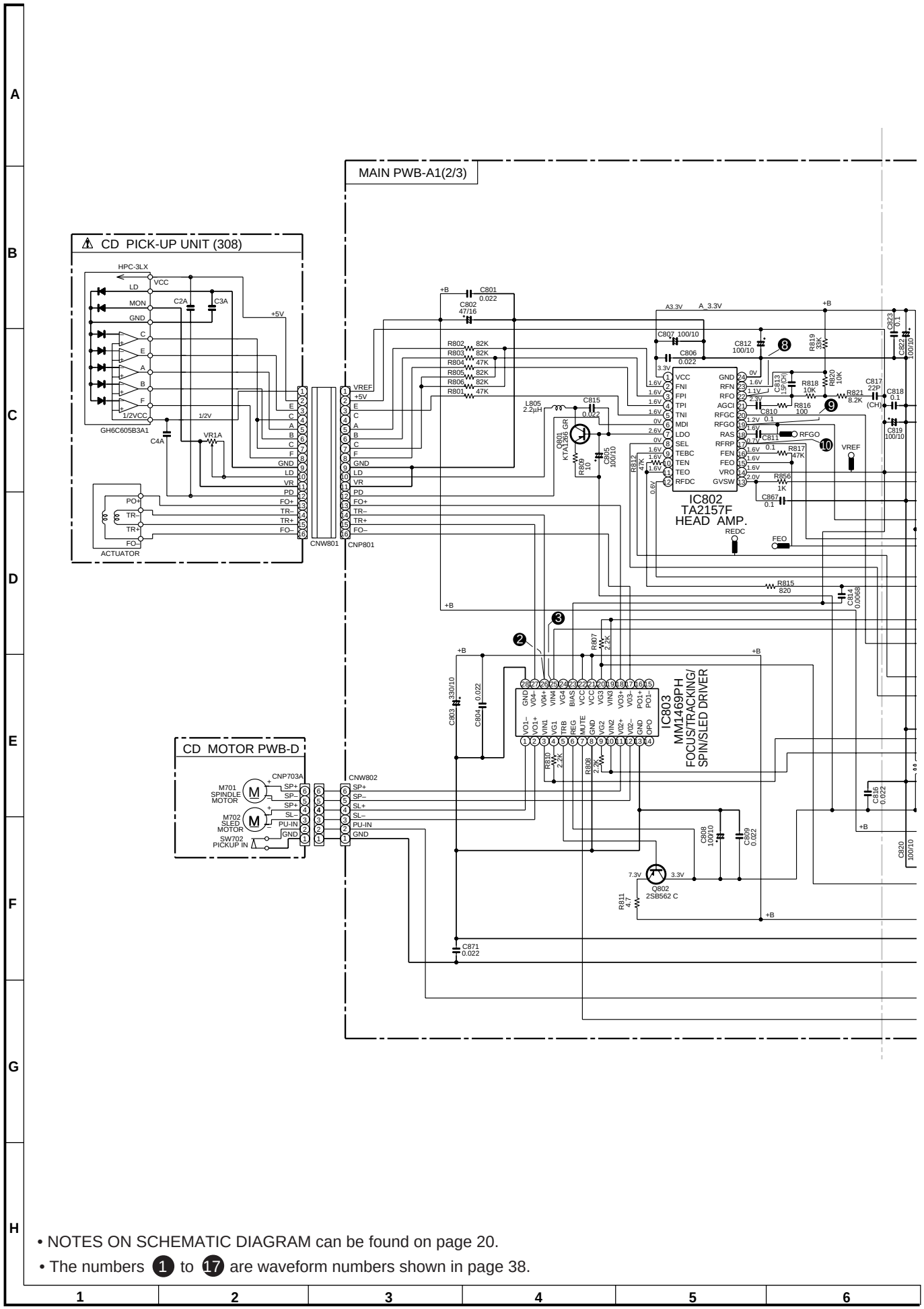
• NOTES ON SCHEMATIC DIAGRAM can be found on page 20.

Figure 28 SCHEMATIC DIAGRAM (5/10)



7	8	9	10	11	12

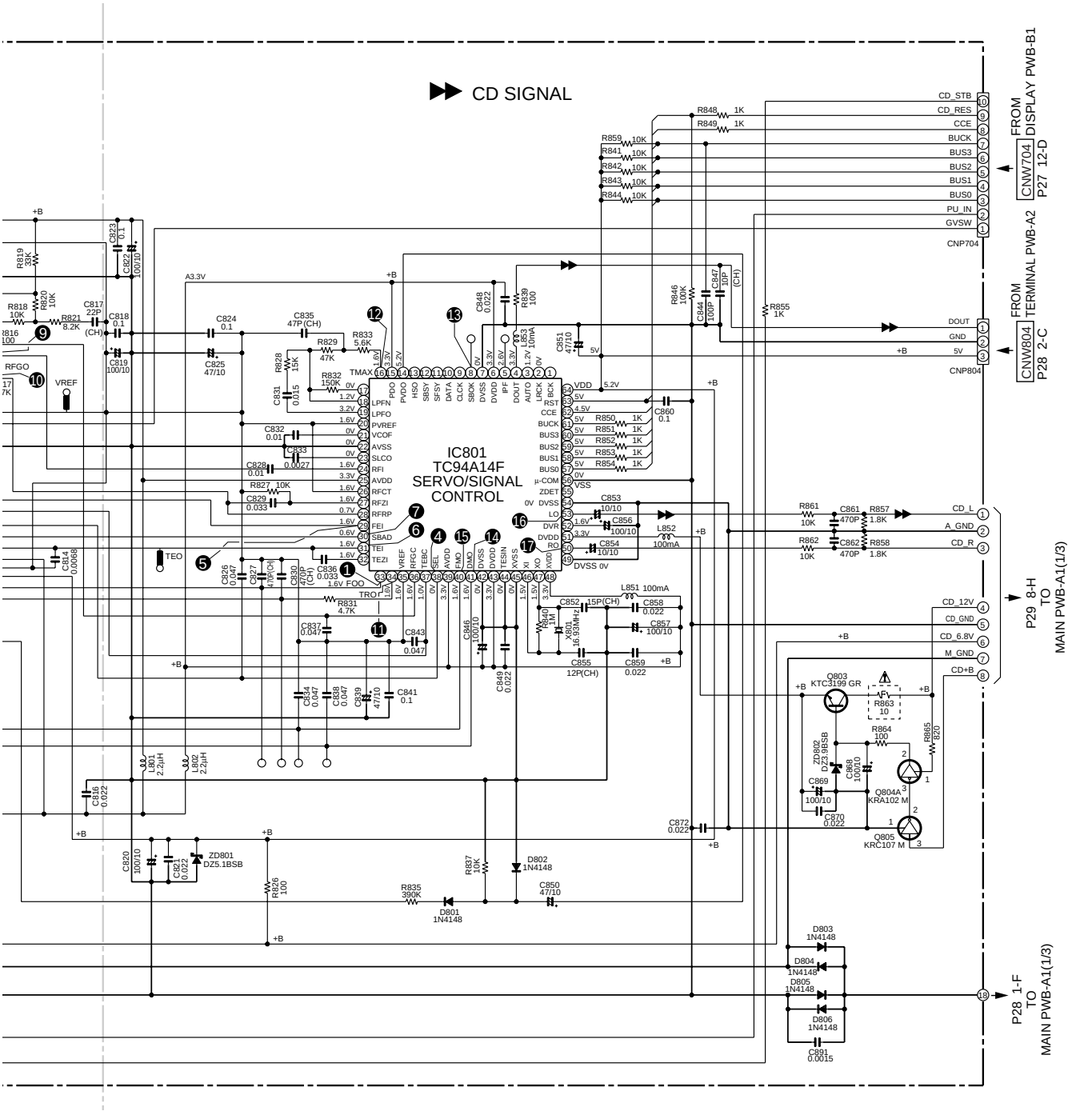
Figure 29 SCHEMATIC DIAGRAM (6/10)



• NOTES ON SCHEMATIC DIAGRAM can be found on page 20.

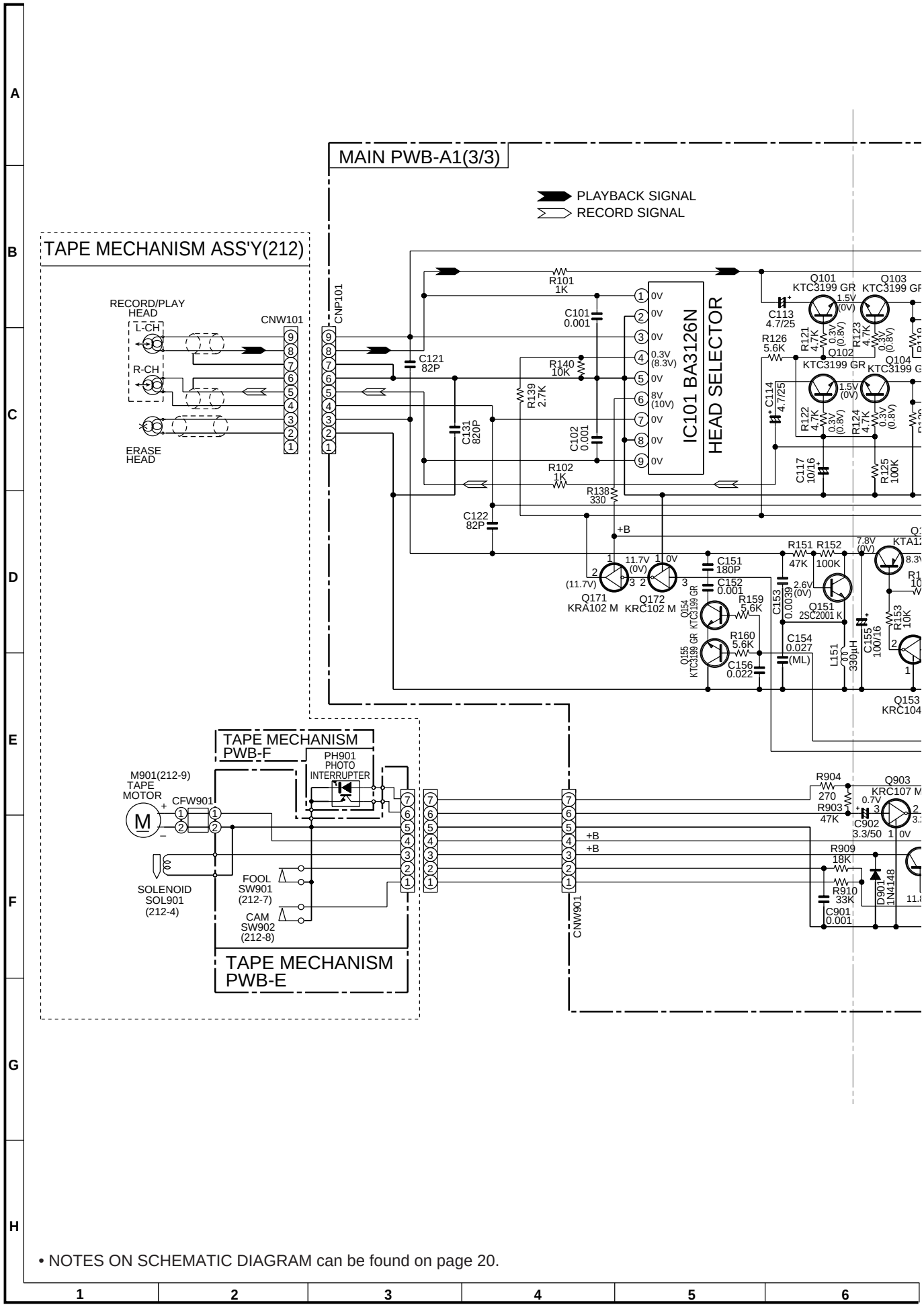
• The numbers ❶ to ⓱ are waveform numbers shown in page 38.

Figure 30 SCHEMATIC DIAGRAM (7/10)



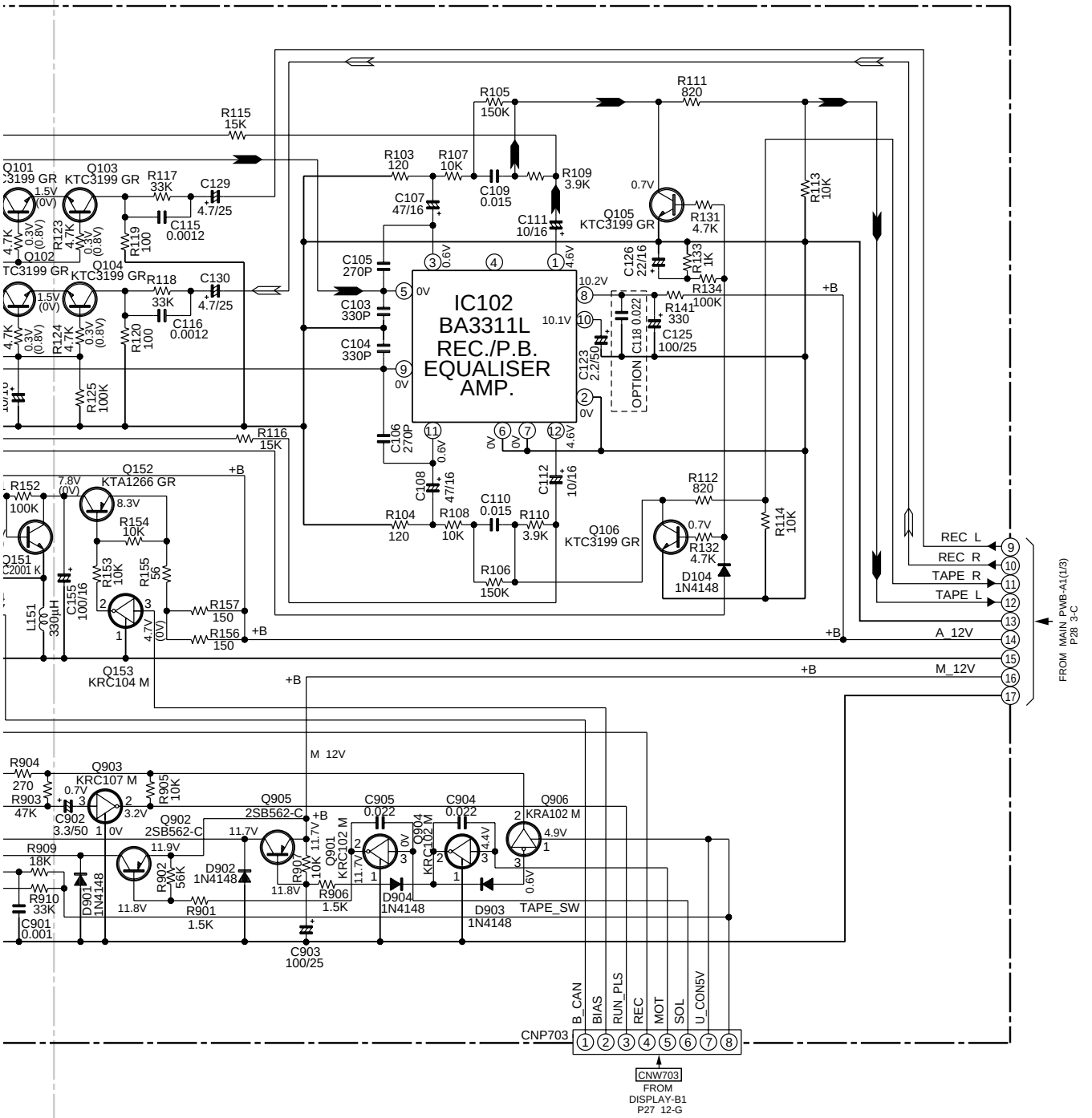
7	8	9	10	11	12

Figure 31 SCHEMATIC DIAGRAM (8/10)



• NOTES ON SCHEMATIC DIAGRAM can be found on page 20.

Figure 32 SCHEMATIC DIAGRAM (9/10)



7	8	9	10	11	12

Figure 33 SCHEMATIC DIAGRAM (10/10)

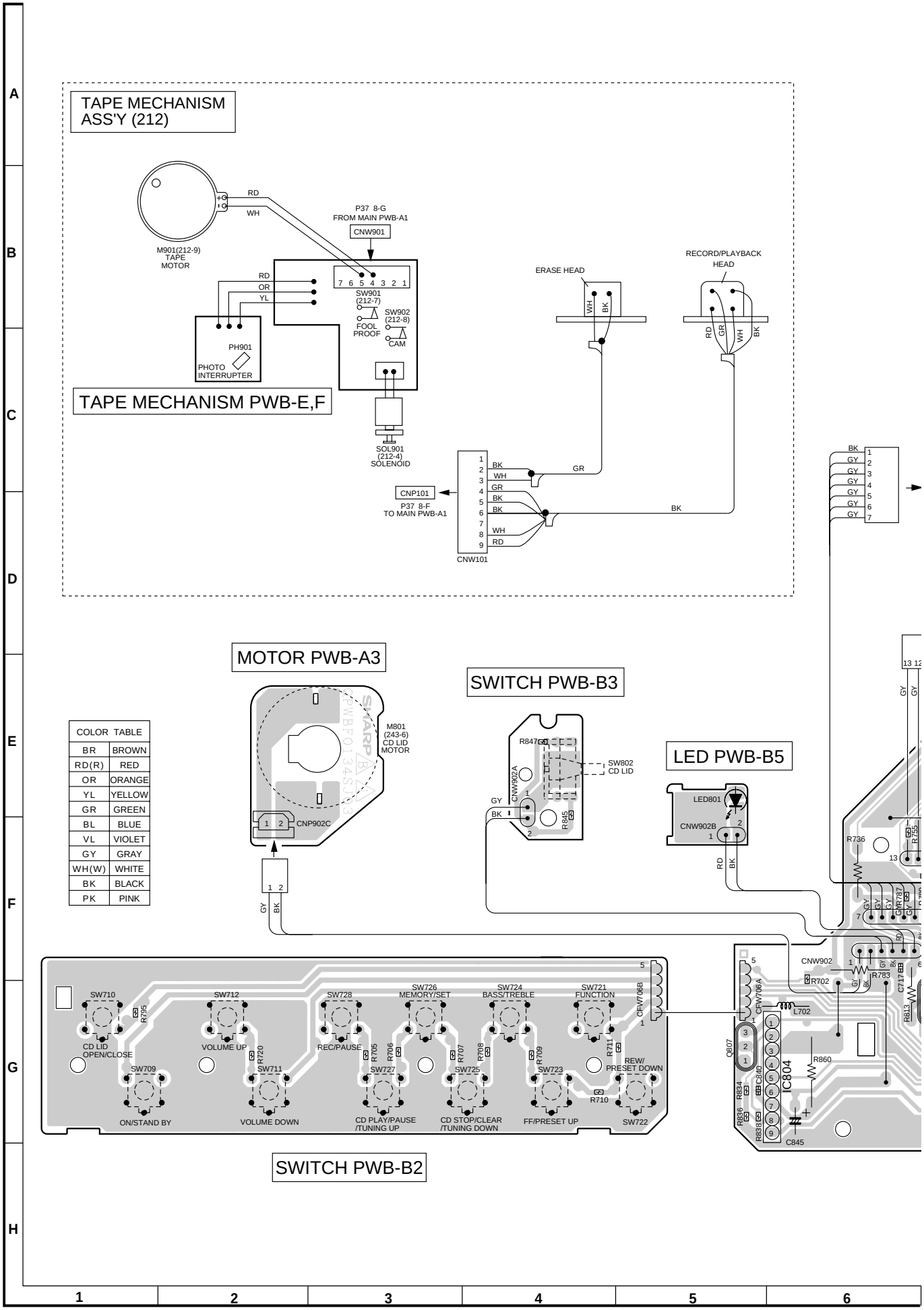
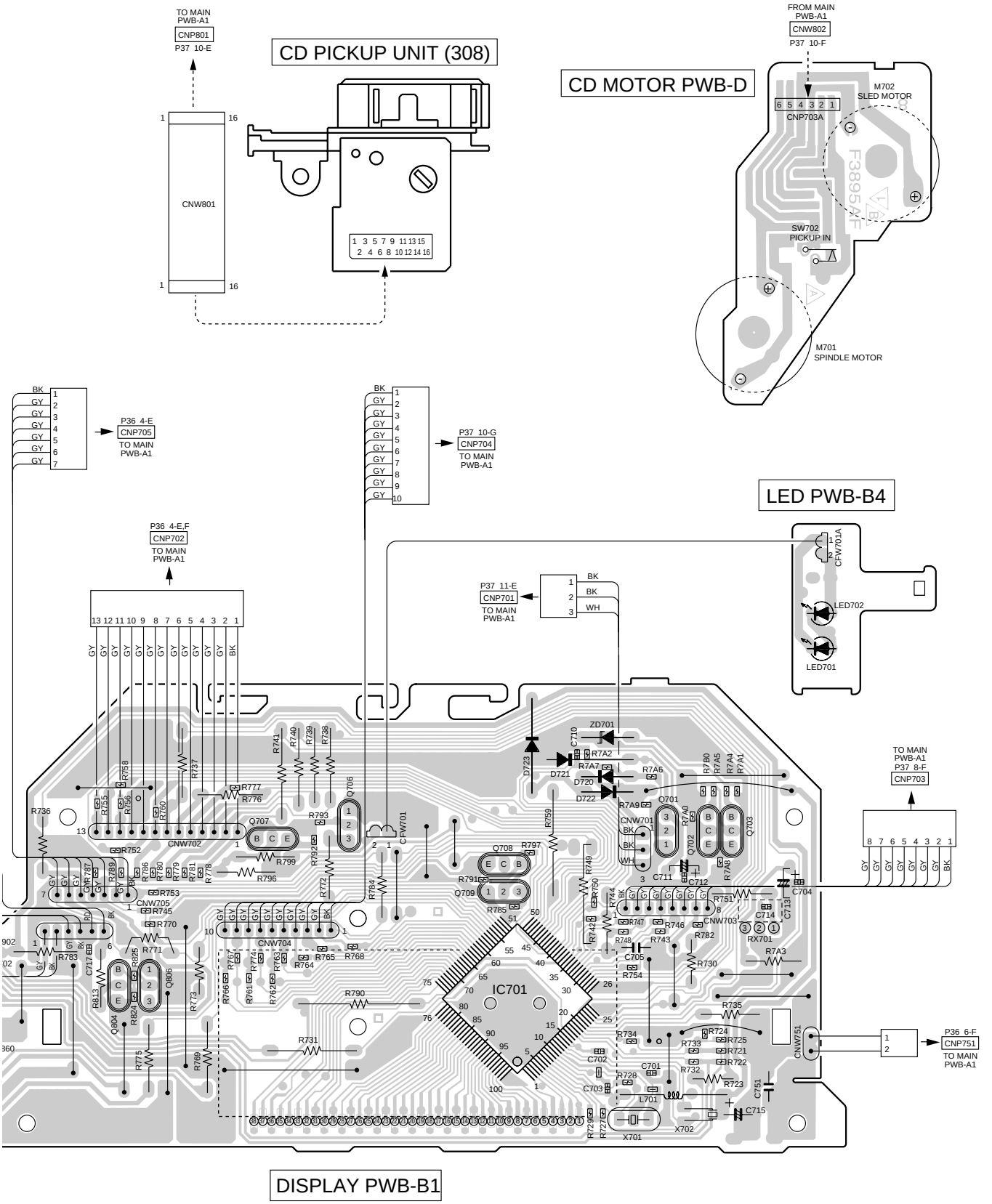
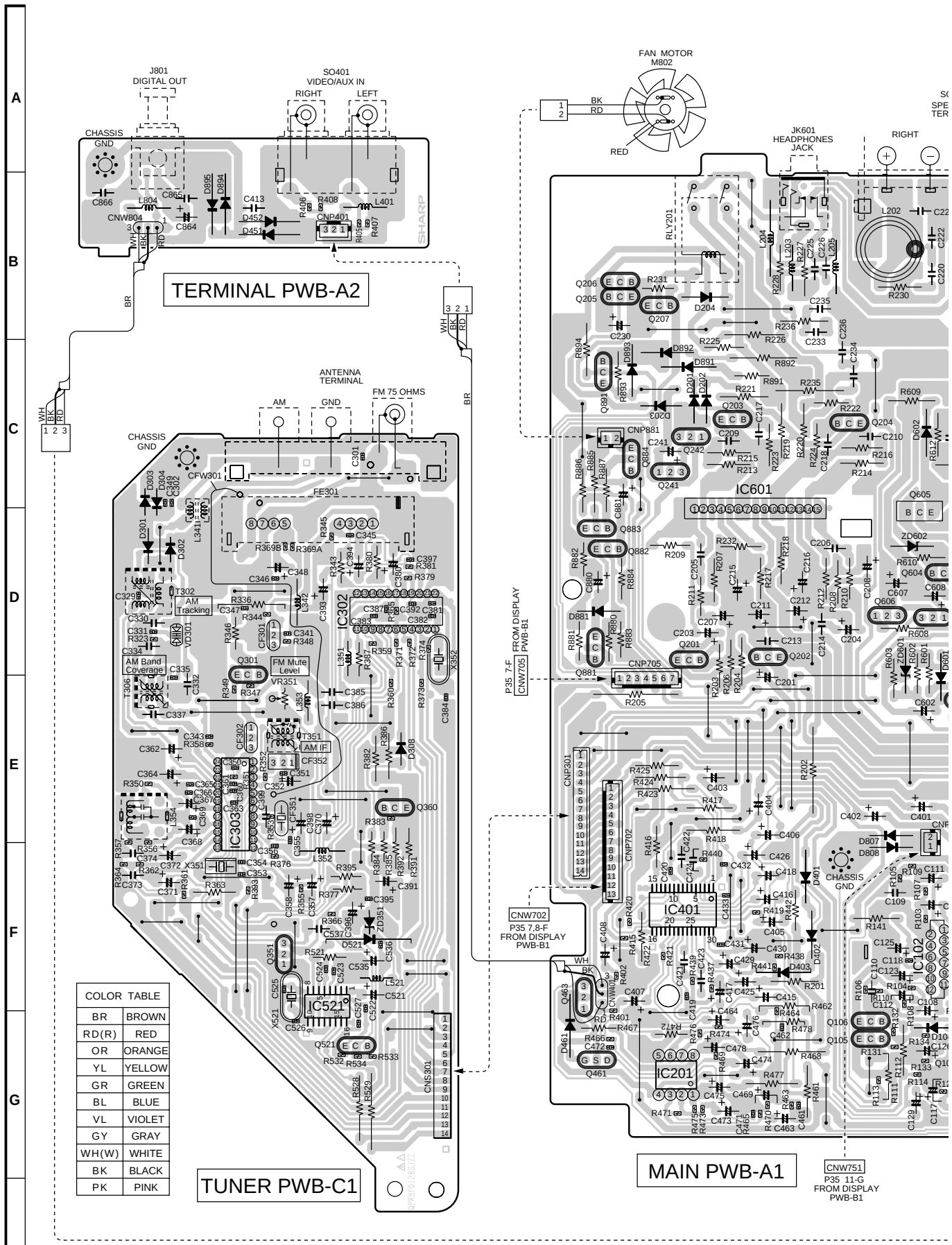


Figure 34 WIRING SIDE OF P.W.BOARD (1/4)



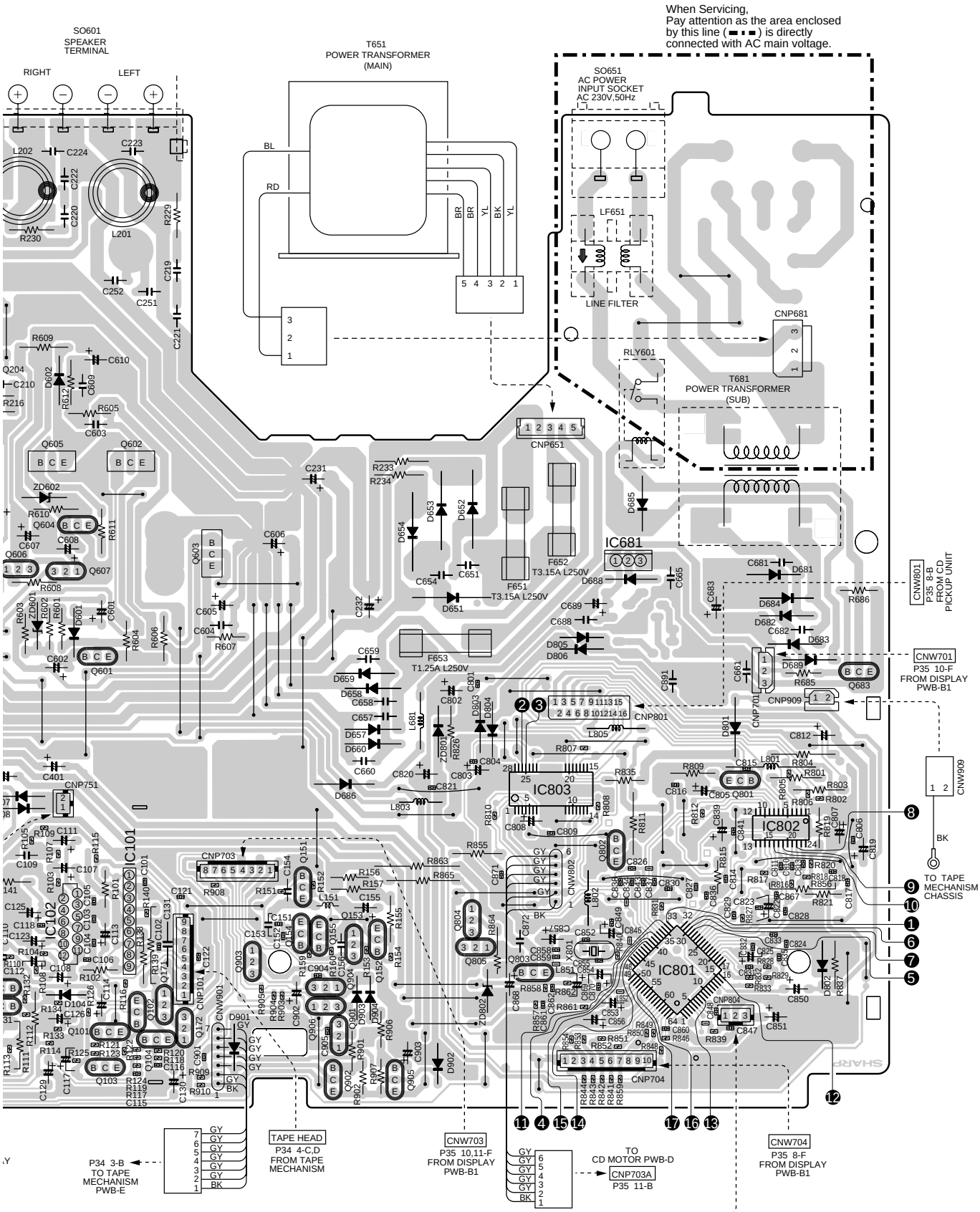
7	8	9	10	11	12

Figure 35 WIRING SIDE OF P.W.BOARD (2/4)



• The numbers ❶ to ⓱ are waveform numbers shown in page 38.

Figure 36 WIRING SIDE OF P.W.BOARD (3/4)



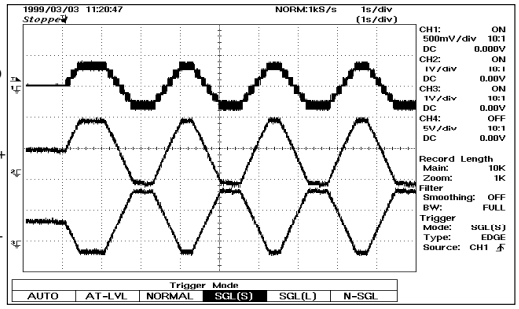
7	8	9	10	11	12

Figure 37 WIRING SIDE OF P.W.BOARD (4/4)

WAVEFORMS OF CD CIRCUIT

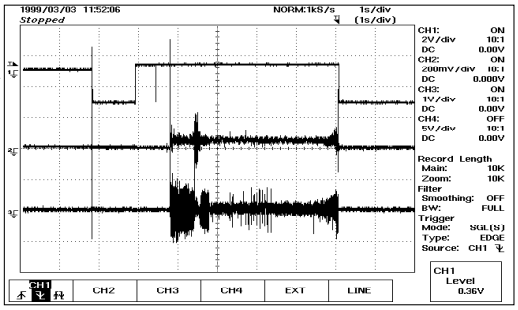
NO DISC FOCUS SEARCH

1 FOO — IC801 33pin
2 FO+ — IC803 26pin
3 FO- — IC803 25pin



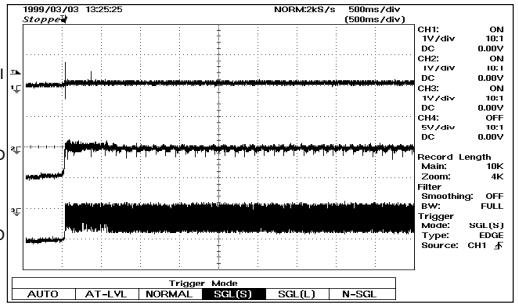
FOCUS SEARCH→TOC IL

4 SEL — IC801 38pin
5 FEI — IC801 29pin
6 TEI — IC801 31pin



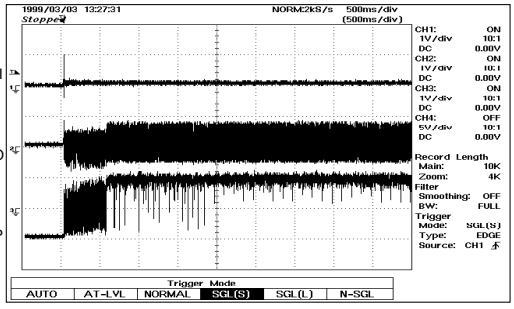
STOP→PLAY

5 FEI — IC801 29pin
7 SBAD — IC801 30pin
8 RFO — IC802 22pin



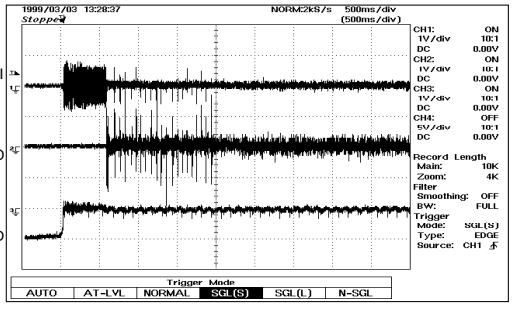
STOP→PLAY

5 FEI — IC801 29pin
9 RFGO — IC802 19pin
10 RFRP — IC802 17pin



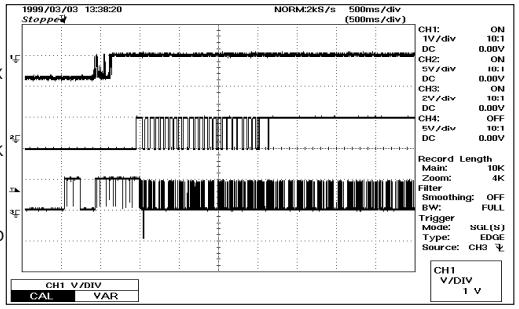
STOP→PLAY

6 TEI — IC801 31pin
11 TRO — IC801 34pin
7 SBAD — IC801 30pin



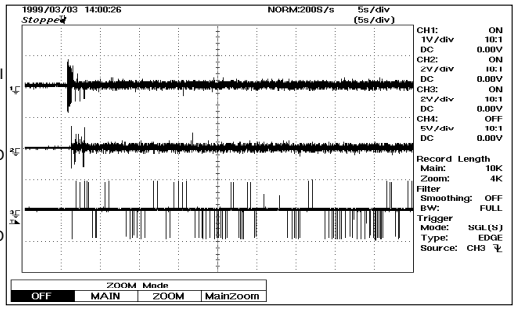
STOP→PLAY

12 TMAX — IC801 16pin
13 SBOK — IC801 8pin
14 DMO — IC801 41pin



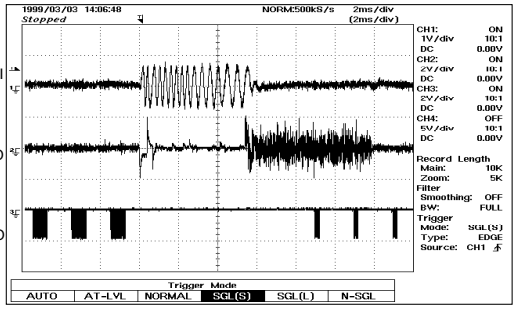
STOP→PLAY

6 TEI — IC801 31pin
11 TRO — IC801 34pin
15 FMO — IC801 40pin



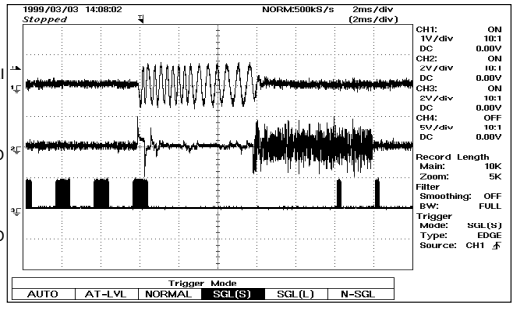
CUE

6 TEI — IC801 31pin
11 TRO — IC801 34pin
15 FMO — IC801 40pin



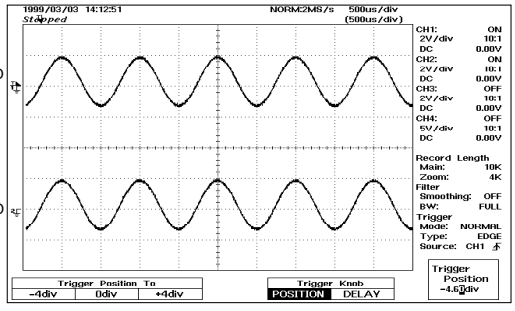
REVIEW

6 TEI — IC801 31pin
11 TRO — IC801 34pin
15 FMO — IC801 40pin



TCD-782 TNO-02 PLAYBACK

16 LO — IC801 53pin
17 RO — IC801 50pin



TROUBLESHOOTING

When the CD does not function

When the CD section does not operate when the objective lens of the optical pickup is dirty, this section may not operate. Clean the objective lens, and check the playback operation. When this section does not operate even after the above step is taken, check the following items.
Remove the cabinet and follow the troubleshooting instructions.
"Track skipping and/or no TOC (Table Of Contents) may be caused by build up of dust other foreign matter on the laser pickup lens. Before attempting any adjustment make certain that the lens is clean. If not, clean it as mentioned below."

Turn off the power, and wipe the lens softly using a cleaning paper moistened with commercially available cleaning solution so as not to damage it.
Be careful not to touch the lens with bare hands.

Dust gradually accumulates on the objective lens during use, and it may degrade performance.
To avoid this problem, use a cleaning disc designed for CD optical pickup lenses.

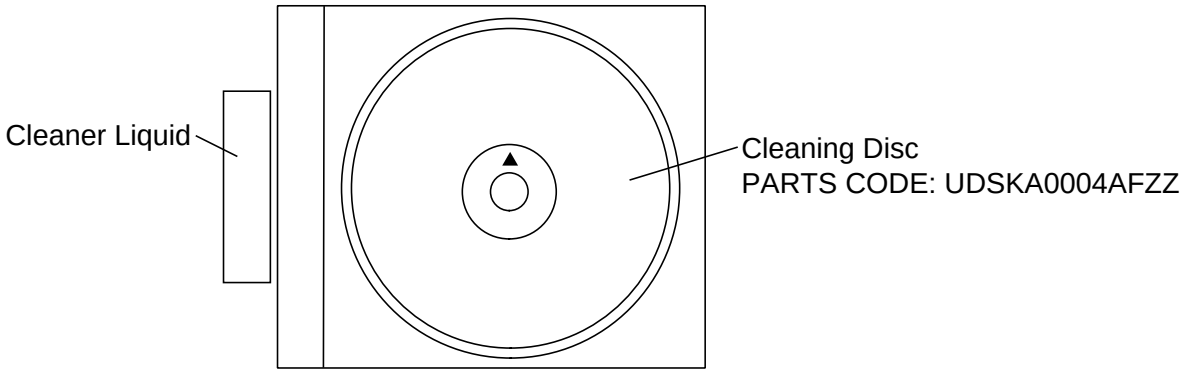
HOW TO USE

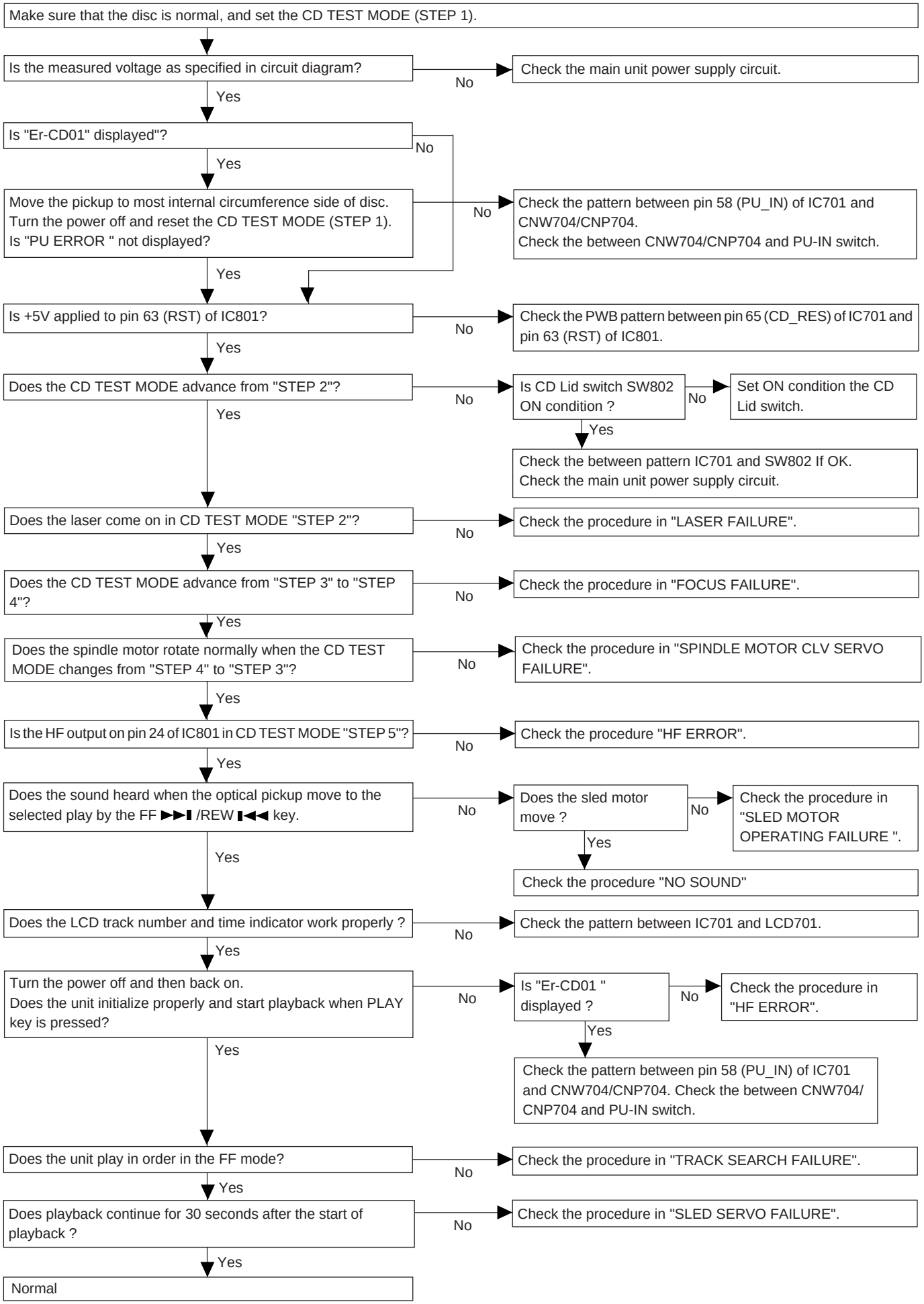
1. Using the brush in the cleaner cap, apply 1 or 2 drops of the cleaning fluid to the brush on the CD cleaner disc which has ▲ the mark next to it.
2. Place the CD cleaner disc onto the CD disc tray with the brush side down, then press the play button.
3. You will hear music for about 20 seconds and the CD player will automatically stop. If it continues to turn, press the stop button.

CAUTION

- The CD lens cleaner should be effective for 30 - 50 operations, however if the brushes become worn out earlier then please replace the cleaner disc.
- If the CD cleaner brushes become very wet then wipe off any excess fluid with a soft cloth.
- Do not drink the cleaner fluid or allow it to come in contact with the eyes. In the event of this happening then drink and / or rinse with clean water and seek medical advice.
- The CD cleaner disc must not be used on car CD player or on computer CD ROM drives.

All rights reserved. Unauthorized duplicating, broadcasting and renting product is prohibited by law.




Make sure that the disc is normal, and set the CD TEST MODE (STEP 1).
Is the measured voltage as specified in circuit diagram?
No
Check the main unit power supply circuit.
Yes
Is "Er-CD01" displayed"?
No
Yes
Move the pickup to most internal circumference side of disc.
Turn the power off and reset the CD TEST MODE (STEP 1).
Is "PU ERROR " not displayed?
No
Check the pattern between pin 58 (PU_IN) of IC701 and CNW704/CNP704.
Check the between CNW704/CNP704 and PU-IN switch.
Yes
Is +5V applied to pin 63 (RST) of IC801?
No
Check the PWB pattern between pin 65 (CD_RES) of IC701 and pin 63 (RST) of IC801.
Yes
Does the CD TEST MODE advance from "STEP 2"?
No
Is CD Lid switch SW802 ON condition ?
No
Set ON condition the CD Lid switch.
Yes
Check the between pattern IC701 and SW802 If OK.
Check the main unit power supply circuit.
Yes
Does the laser come on in CD TEST MODE "STEP 2"?
No
Check the procedure in "LASER FAILURE".
Yes
Does the CD TEST MODE advance from "STEP 3" to "STEP 4"?
No
Check the procedure in "FOCUS FAILURE".
Yes
Does the spindle motor rotate normally when the CD TEST MODE changes from "STEP 4" to "STEP 3"?
No
Check the procedure in "SPINDLE MOTOR CLV SERVO FAILURE".
Yes
Is the HF output on pin 24 of IC801 in CD TEST MODE "STEP 5"?
No
Check the procedure "HF ERROR".
Yes
Does the sound heard when the optical pickup move to the selected play by the FF ▶▶▮ /REW ▮◀◀ key.
No
Does the sled motor move ?
No
Check the procedure in "SLED MOTOR OPERATING FAILURE ".
Yes
Check the procedure "NO SOUND"
Yes
Does the LCD track number and time indicator work properly ?
No
Check the pattern between IC701 and LCD701.
Yes
Turn the power off and then back on.
Does the unit initialize properly and start playback when PLAY key is pressed?
No
Is "Er-CD01 " displayed ?
No
Check the procedure in "HF ERROR".
Yes
Check the pattern between pin 58 (PU_IN) of IC701 and CNW704/CNP704. Check the between CNW704/CNP704 and PU-IN switch.
Yes
Does the unit play in order in the FF mode?
No
Check the procedure in "TRACK SEARCH FAILURE".
Yes
Does playback continue for 30 seconds after the start of playback ?
No
Check the procedure in "SLED SERVO FAILURE".
Yes
Normal

• Laser failure.

Is +6.8V applied to the emitter of Q605 ?
- No → Check the PWB pattern between emitter of Q605 and R826.
- Yes ↓

Is +5V applied to the cathode side of ZD801 ?
- No → Check the peripheral parts of ZD801,C820 and C821.
- Yes ↓

Is +5V applied to the pin 64 (VDD) of IC801 ?
- No → Check the PWB pattern between cathode side of ZD801 and pin 64 of IC801.
- Yes ↓

Is +3.3V applied to the pin 1 (VCC) of IC802 ?
- No → Check the PWB pattern between collector of Q802 and pin 1 of IC802.
- Yes ↓

Is 0V applied to the pin 38 (SEL) of IC801 ?
- No → Does the laser come on when pattern cut between pin 8 (SEL) of IC802 and pin 38 (SEL) of IC801 ?
  - Yes → Check the PWB pattern between IC701 and IC801 (BUCK/CCE/BUS0~3)
  - No ↓
- Yes ↓

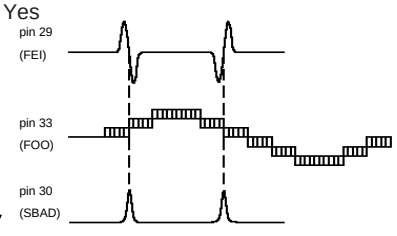
Is approx. 2V applied to the collector of Q801.
- No → Check the peripheral parts of IC802 and Q801. If it is normal, the optical pickup is faulty.
- Yes ↓

Check CNP801/CNW801. If it is normal, the optical pickup is faulty.

• Focus failure.

Does the optical pickup move up and down when the disc is removed?
- No → Check as stated in item "FOCUS SERVO SAWTOOTH WAVE FAILURE".
- Yes ↓

Is the following waveform output at the pin 29 (FEI) of IC801 when the disc is set?
- No → Check the periphery of IC802 and CNP801/CNW801. Is it normal?
  - Yes → The optical pickup is faulty.
- Yes ↓



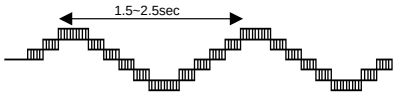
Is the waveform shown above input at the pin 30 (SBAD) of IC801?
- No → Check the pattern between pin 12 of IC802 and pin 30 of IC801. Check the periphery of IC802 and CNP801/CNW801.
- Yes ↓

IC802 is faulty.

• Focus servo sawtooth wave failure.

Is sawtooh wave output to the pin 33 (FOO) of IC801 ?
No → IC801 is faulty.

Yes

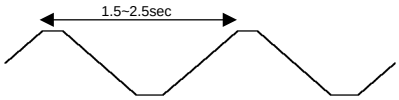


Is +6.8V applied to the pins 21 and 22 (VCC) of IC803 ?
No → Check the PWB pattern between pin emitter of Q605 and IC803.

Yes

Is sawtooth wave obtained between pins 17 and 18 of IC803 ?
No → Is +5V applied to the pin 7 (MUTE) of IC803 ?
No → Check the PWB pattern between pin 7 of IC803 and pin 66 (CD STB) of IC701.
Yes → Check the PWB pattern between pin 33 (FOO) of IC801 and pins 19 and 20 of IC803. If OK. IC803 is faulty.

Yes



Is sawtooth wave obtained between pins 13 and 16 of CNP801/CNW801 ? (as shown above)
No → Check the PWB pattern between CNP801/CNW801 and IC803.

Yes

CNP801/CNW801 connection failure or optical pickup failure.

• Spindle motor clv servo failure.

Is following wave output to the pin 41 (DMO) of IC801 when the CD TEST MODE "STEP 3" is changed to " STEP 4" ?
No → Check the procedure in "HF ERROR". If OK. IC801 is faulty.

Yes

Is above wave obtained between pins 1 and 2 of IC803 ?
No → Check the PWB pattern between pin 41 (DMO) of IC801 and pins 9 and 10 of IC803. If OK. IC803 is faulty.

Yes

Is above wave obtained between pins 9 and 12 of CNP801/ CNW801 ?
No → Check the PWB pattern between CNP801/CNW801 and IC803.

Yes

CNP801/CNW801 connection failure or optical pickup failure.

• HF error.

Is output (tracking error signal) obtained at the pins 31 (TEI) and 32 (TEZI) of IC801 the CD TEST MODE "STEP 4" is changed to "STEP 5"?

No → Is output obtained at the pins 3 and 8 of CNP801/CNW801.

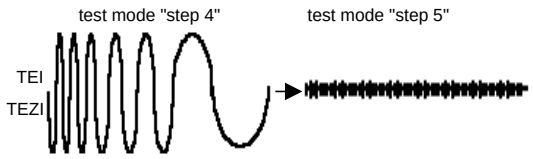
No → Optical pickup failure.

Yes → Check the periphery of IC802. Check the PWB pattern between pin 11 (TEO) of IC802 and pins 31 and 32 of IC801. Is it normal ?

No → IC802 is faulty.

Yes → Check the PWB pattern between pin 34 (TRO) of IC801 and pin 25 of IC803. Check the periphery of IC803 and CNP801/CNW801. If OK. Optical pickup failure.

Yes



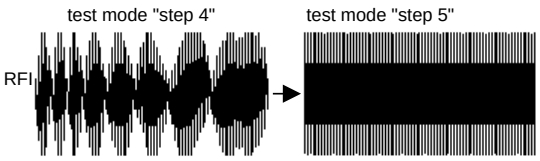
Is output (HF signal) obtained at the pin 24 (RFI) of IC801 when the CD TEST MODE "STEP 4" is changed to "STEP 5"?

No → Is output obtained at the pins 4 and 5,6 of CNP801/CNW801.

No → Optical pickup failure.

Yes → Check the periphery of IC802. Check the PWB pattern between pin 19 (RFGO) of IC802 and pins 24 (RFI) of IC801. If OK. IC802 is faulty

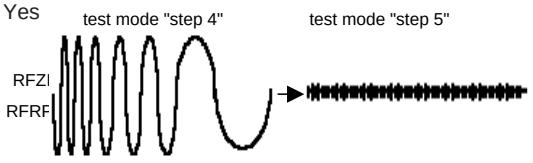
Yes



Is output (HF signal) obtained at the pins 27 (RFZI) and 28 (RFRP) of IC801 when the CD TEST MODE "STEP 4" is changed to "STEP 5"?

No → Check the periphery of IC802. Check the PWB pattern between pin17 (RFRP) of IC802 and pins 27 (RFZI) and 28 (RFRP) of IC801. If OK. IC802 is faulty.

Yes



Is the following wave output to the pin 41 (DMO) of IC801 when the CD TEST MODE "STEP 4" or "STEP 5"?

No → Check the periphery pins 15~19 of IC801. If OK. IC801 failure.

Yes

Normal.

• No sound.

No sound from both L and R-ch?

No → Check the interval between the pins 50 or 53 of IC801 and the pins 1 or 15 of IC601.

Yes → Is +3.3V applied to pin 51 (DVDD) of IC801?

No → Check the PWB pattern between pin 51 of IC801 and Q803.

Yes → Is signal of pins 50 and 53 of IC801 output?

No → Check the peripheral parts of IC801. If OK, IC801 is faulty.

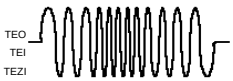
Yes → The main PWB is faulty.

• Track search failure

Does the sled motor run in FF/REW state when the SERVO TEST MODE "STEP1" is set?
- No → Check as stated in item "SLED MOTOR OPERATION FAILURE".
- Yes ↓

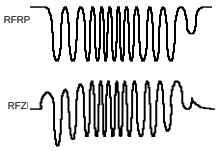
Is the following wave output to the pin 34 (TRO) of IC801 during track search in normal playback?
- No → IC801 failure.
- Yes ↓

Is the following wave output to the pins 11 (TEO) of IC802 during track search in normal playback?
- No → Check the PWB pattern between pin 34 (TRO) of IC801 and pin 25 of IC803. Check the PWB pattern between pins 26 and 27 of IC803 and Optical pickup. If OK. Optical pickup failure.
- Yes ↓



Is the above wave output to the pins 31 (TEI) and 32 (TEZI) of IC801 during track search in normal playback?
- No → Check the PWB pattern between pin 11 (TEO) of IC802 and pins 31 and 32 of IC801. If OK. IC802 failure.
- Yes ↓

Is the following wave output to the pin 27 (RFZI) and 28 (RFRP) of IC801 during track search in normal playback?
- No → Check the PWB pattern between pins 22 (RFO),17 (RFRP), 19 (RFGO) and 20 (RFGC) of IC802 and pins 24,27,28 and 36 of IC801. If OK. IC802 failure.
- Yes ↓

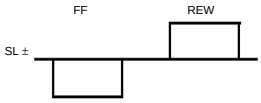


Normal.

• Sled motor operation failure.

Is following sled feed signal output the pin 40 (FMO) of IC801 when FF ▶▶▮ /REW ▮◀◀ key is pressed after the CD TEST MODE "STEP 1" is set?
- No → C801 is faulty.
- Yes ↓

Is following sled feed signal output the pins 3 and 4 of IC803 when FF ▶▶▮ /REW ▮◀◀ key is pressed after the CD TEST MODE "STEP 1" is set?
- No → Check the PWB pattern between pin 40 of IC801 and pins 3 and 4 of IC803.
- Yes ↓



Is sled feed signal output the pins 1 and 2 of IC803?
- No → Check the peripheral parts of IC803. If OK, IC803 is faulty.
- Yes ↓

Is sled feed voltage applied between both terminals of sled motor?
- No → Check the CNW802.
- Yes ↓

Check the CD mechanism (periphery of sled motor). If the sled motor does not run when DC2.0V is applied to both terminals of sled motor, the sled motor is faulty.

• Sled servo failure.

Is following sled signal output the pin 40 (FMO) of IC801 during playback?
- No → IC801 is faulty.
- Yes ↓

Normal.

FUNCTION TABLE OF IC

IC401 VHiLC75342M-1: Function/Volume Equalizer (LC75342M)

Pin No.	Port Name	Function
1	DI	Serial data and clock input pin for control.
2	CE	Chip enable pin. Data written into an internal latch in a timing of [H] -> [L]. Each analog switch is activated. Data transfer enabled at [H] level.
3	VSS	Ground pin.
4	TEST	Electronic volume control pin. To be set to the VSS potential.
5	LOUT	Volume + equalizer output pin.
6	LBASS2	Bass-band filter comprising capacitor and resistor connection pin.
7	LBASS1	Bass-band filter comprising capacitor and resistor connection pin.
8	LTRE	Capacitor connection pin comprising treble band filter.
9	LIN	Volume + equalizer input pin.
10	LSEL0	Input selector output pin.
11	L4	Input signal pin.
12	L3	Input signal pin.
13	L2	Input signal pin.
14	L1	Input signal pin.
15*	NC	No CONNECT pin. To be open or connected to VSS.
16*	NC	No CONNECT pin. To be open or connected to VSS.
17	R1	Input signal pin.
18	R2	Input signal pin.
19	R3	Input signal pin.
20	R4	Input signal pin.
21	RSEL0	Input selector output pin.
22	RIN	Volume + equalizer input pin.
23	RTRE	Capacitor connection pin comprising treble band filter.
24	RBASS1	Bass-band filter comprising capacitor and resistor connection pin.
25	RBASS2	Bass-band filter comprising capacitor and resistor connection pin.
26	ROUT	Volume + equalizer output pin.
27*	NC	No CONNECT pin. To be open or connected to VSS.
28	Vref	0.5 x VDD voltage generation block for analog ground. Capacitor of several 10μF to be connected between Vref and AWSS (VSS) as a counter measure against power ripple.
29	VDD	Supply pin.
30	CL	Serial data and clock input pin for control.

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

IC401 VHiLC75342M-1: Function/Volume Equalizer (LC75342M)

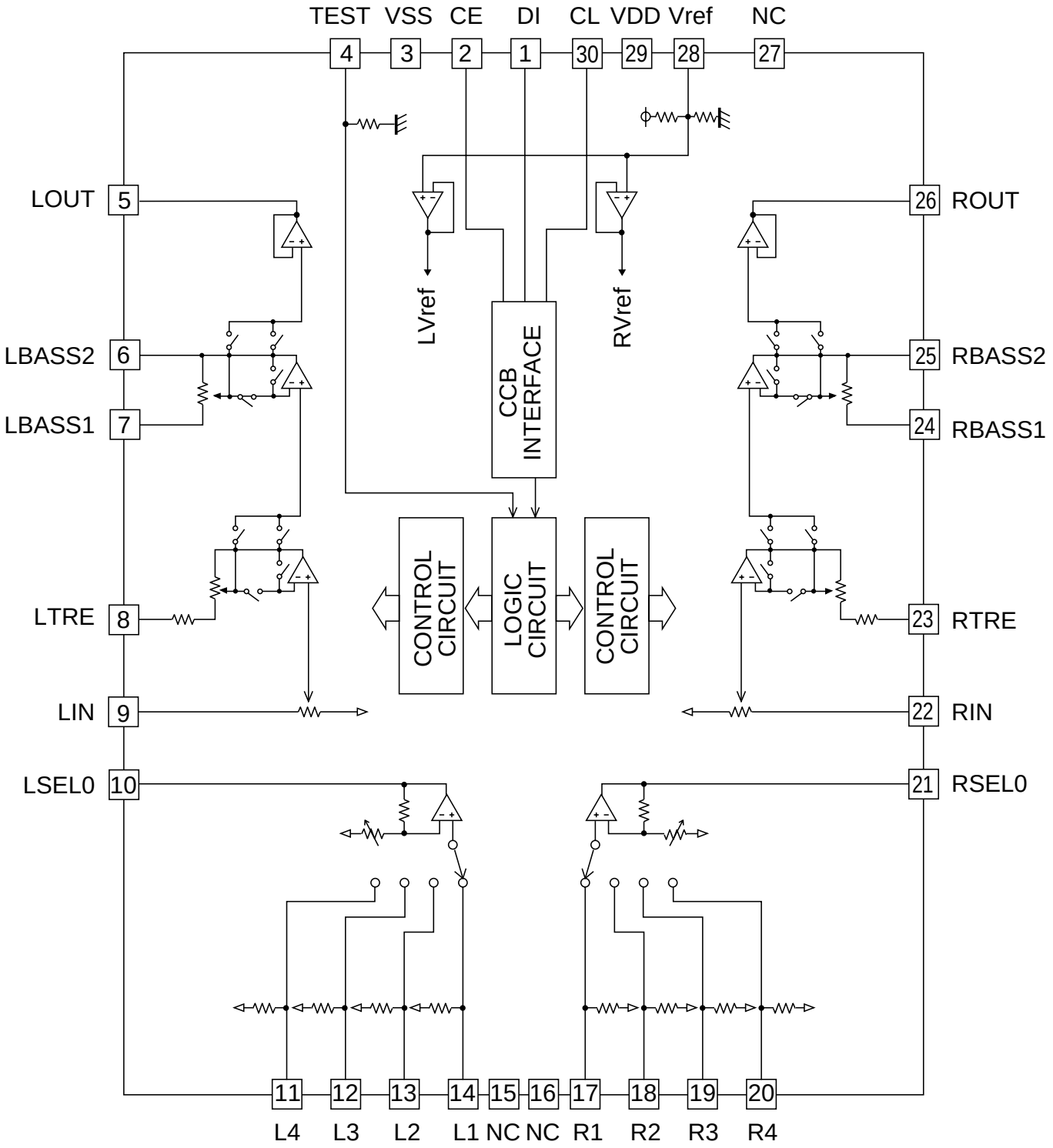
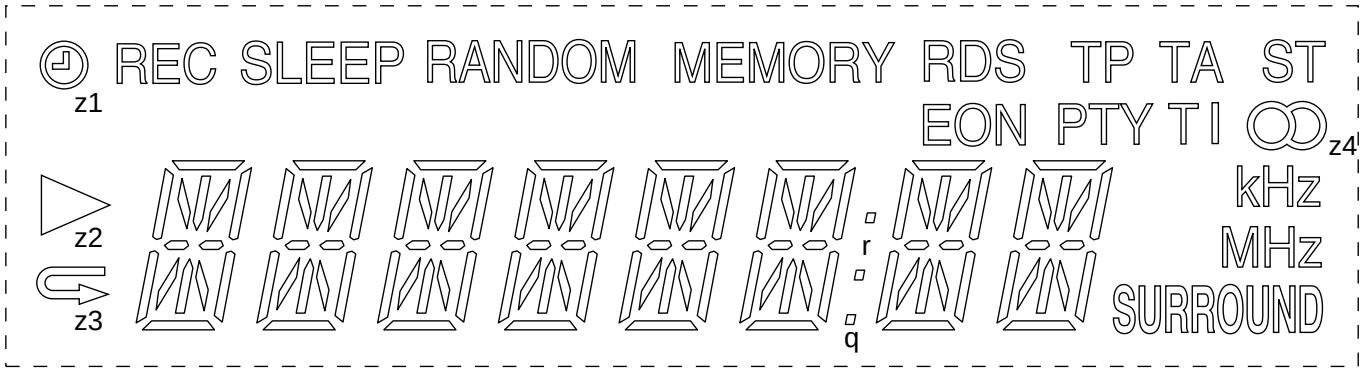


Figure 46 BLOCK DIAGRAM OF IC

LCD701: RV-LX0016SJZZ LCD Display



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42

PinNo	com1	com2	com3	com4
1	com1			
2		com2		
3			com3	
4				com4
5	z1	b1	c1	z2
6	h1	j1	l1	k1
7	g1	n1	m1	d1
8	a1	p1	f1	e1
9	REC	b2	c2	z3
10	h2	j2	l2	k2
11	g2	n2	m2	d2
12	a2	p2	f2	e2
13	SLEEP	b3	c3	MHz
14	h3	j3	l3	k3
15	g3	n3	m3	d3
16	a3	p3	f3	e3
17	RANDOM	b4	c4	kHz
18	h4	j4	l4	k4
19	g4	n4	m4	d4
20	a4	p4	f4	e4
21	MEMORY	b5	c5	z4

PinNo	com1	com2	com3	com4
22	h5	j5	l5	k5
23	g5	n5	m5	d5
24	a5	p5	f5	e5
25	RDS	b6	c6	ST
26	h6	j6	l6	k6
27	g6	n6	m6	d6
28	a6	p6	f6	e6
29	r	b7	c7	q
30	h7	j7	l7	k7
31	g7	n7	m7	d7
32	a7	p7	f7	e7
33	TP	b8	c8	
34	h8	j8	l8	k8
35	g8	n8	m8	d8
36	a8	p8	f8	e8
37	EON	PTY	TI	TA
38				SRS(0)
39				com4
40			com3	
41		com2		
42	com1			

Figure 47 LCD SEGMENT

–MEMO–

SHARP PARTS GUIDE

COMPACT AUDIO SYSTEM

MODEL XL-T300H

XL-T300H Compact Audio System consisting of XL-T300H (main unit) and CP-XLT300H (speaker system).

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following information.

1. MODEL NUMBER
2. REF. No.
3. PART NO.
4. DESCRIPTION

★ MARK: SPARE PARTS-DELIVERY SECTION

For U.S.A. only

Contact your nearest SHARP Parts Distributor to order.

For location of SHARP Parts Distributor,
Please call Toll-Free;
1-800-BE-SHARP

Explanation of capacitors/resistors parts codes

Capacitors

VCC ..... Ceramic type
VCK ..... Ceramic type
VCT ..... Semiconductor type
VC • • MF ..... Cylindrical type (without lead wire)
VC • • MN ..... Cylindrical type (without lead wire)
VC • • TV ..... Square type (without lead wire)
VC • • TQ ..... Square type (without lead wire)
VC • • CY ..... Square type (without lead wire)
VC • • CZ ..... Square type (without lead wire)
VC • • • • • • • • • J .. The 13th character represents capacity difference.
("J" ±5%, "K" ±10%, "M" ±20%, "N" ±30%,
"C" ±0.25 pF, "D" ±0.5 pF, "Z" +80-20%.)

If there are no indications for the electrolytic capacitors, error is ±20%.

Resistors

VRD ..... Carbon-film type
VRS ..... Carbon-film type
VRN ..... Metal-film type
VR • • MF ..... Cylindrical type (without lead wire)
VR • • MN ..... Cylindrical type (without lead wire)
VR • • TV ..... Square type (without lead wire)
VR • • TQ ..... Square type (without lead wire)
VR • • CY ..... Square type (without lead wire)
VR • • CZ ..... Square type (without lead wire)
VR • • • • • • • • • J .. The 13th character represents error.
("J" ±5%, "F" ±1%, "D" ±0.5%.)

If there are no indications for other parts, the resistors are ±5% carbon-film type.

NOTE:
Parts marked with "⚠" are important for maintaining the safety of the set.
Be sure to replace parts with specified ones for maintaining the safety and performance of the set.

NO.	PART CODE	★	PRICE RANK	DESCRIPTION
INTEGRATED CIRCUITS				
IC101	VHIBA3126N/-1	J	AF	Head Selector,BA3126N
IC102	VHIBA3311L/-1	J	AK	REC./P.B.Equaliser Amp., BA3311L
IC201	VHIKIA4558P-1	J	AC	Surround Control,KIA4558P
IC302	VHILC72131/-1	J	AP	PLL (Tuner),LC72131
IC303	VHILA1832S/-1	J	AN	FM IF Det./FM Mpx./AM IF, LA1832S
IC401	VHILC75342M-1	J	AN	Function/Volume Equaliser, LC75342M
IC521	VHILC72723M-1	J	AS	RDS,LC72723M
IC601	VHISTK40202-1	J	AW	Power Amp.,STK40202
IC681	VHIAN78L05/-1	J	AE	Constant Voltage Regulator, AN78L05
IC701	RH-IX0045SJZZ	J		System Microcomputer/FL Driver, IX0045SJ
IC801	VHITC94A14F-1	J	AY	Servo/Signal Control,TC94A14F
IC802	VHITA2157F/-1	J	AN	Head Amp.,TA2157F
IC803	VHIMM1469PH-1	J	AN	Focus/Tracking/Spin/Sled Driver, MM1469PH
IC804	VHITA7291S/-1	J	AH	CD LID Motor Driver,TA7291S
TRANSISTORS				
Q101~106	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q151	VS2SC2001-K-1	J	AD	Silicon,NPN,2SC2001 K
Q152	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q153	VSKRC104M//-1	J	AC	Digital,NPN,KRC104 M
Q154,155	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q171	VSKRA102M//-1	J	AC	Digital,PNP,KRA102 M
Q172	VSKRC102M//-1	J	AC	Digital,NPN,KRC102 M
Q201~207	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q241	VSKRC107M//-1	J	AC	Digital,NPN,KRC107 M
Q242	VSKRA107M//-1	J	AE	Digital,PNP,KRA107 M
Q301	VS2SC380-O/-1	J	AC	Silicon,NPN,2SC380 O
Q351	VSKRC104M//-1	J	AC	Digital,NPN,KRC104 M
Q360	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q461	VS2SK2541//-1	J	AC	FET,2SK2541
Q463	VSKRC107M//-1	J	AC	Digital,NPN,KRC107 M
Q521	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q601	VSKTC3200GR-1	J	AC	Silicon,NPN,KTC3200 GR
Q602,603	VS2SD2012Y/-1	J	AF	Silicon,NPN,2SD2012 Y
Q604	VSKTC3200GR-1	J	AC	Silicon,NPN,KTC3200 GR
Q605	VS2SD2012Y/-1	J	AF	Silicon,NPN,2SD2012 Y
Q606	VSKRA102M//-1	J	AC	Digital,PNP,KRA102 M
Q607	VSKRC107M//-1	J	AC	Digital,NPN,KRC107 M
Q683	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q701	VSKRC102M//-1	J	AC	Digital,NPN,KRC102 M
Q702,703	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q706	VSKRC102M//-1	J	AC	Digital,NPN,KRC102 M
Q707,708	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q709	VSKRC102M//-1	J	AC	Digital,NPN,KRC102 M
Q801	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q802	VS2SB562-C/-1	J	AD	Silicon,PNP,2SB562 C
Q803	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q804	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q804A	VSKRA102M//-1	J	AC	Digital,PNP,KRA102 M
Q805	VSKRC107M//-1	J	AC	Digital,NPN,KRC107 M
Q806,807	VSKRC102M//-1	J	AC	Digital,NPN,KRC102 M
Q881	VSKTC3200GR-1	J	AC	Silicon,NPN,KTC3200 GR
Q882	VS2SC535-C/-1	J	AC	Silicon,NPN,2SC535 C
Q883	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q884	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q891	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q901	VSKRC102M//-1	J	AC	Digital,NPN,KRC102 M
Q902	VS2SB562-C/-1	J	AD	Silicon,PNP,2SB562 C
Q903	VSKRC107M//-1	J	AC	Digital,NPN,KRC107 M
Q904	VSKRC102M//-1	J	AC	Digital,NPN,KRC102 M
Q905	VS2SB562-C/-1	J	AD	Silicon,PNP,2SB562 C
Q906	VSKRA102M//-1	J	AC	Digital,PNP,KRA102 M
DIODES				
D104	VHD1N4148//-1	J	AA	Silicon,1N4148
D201~203	VHD1N4148//-1	J	AA	Silicon,1N4148
D204	VHD1N4004//-1	J	AB	Silicon,1N4004
D301~304	VHD1N4148//-1	J	AA	Silicon,1N4148
D308	VHD1N4148//-1	J	AA	Silicon,1N4148
D401~403	VHD1N4004//-1	J	AB	Silicon,1N4004

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
D451,452	VHD1N4148//-1	J	AA	Silicon,1N4148
D461	VHD1N4148//-1	J	AA	Silicon,1N4148
D521	VHD1N4148//-1	J	AA	Silicon,1N4148
D601,602	VHD1N4148//-1	J	AA	Silicon,1N4148
⚠ D651~654	VHD1N5402M/-1	J	AE	Silicon,1N5402M
⚠ D657~660	VHD1N4004//-1	J	AB	Silicon,1N4004
⚠ D681~684	VHD1N4004//-1	J	AB	Silicon,1N4004
D685	VHD1N4004//-1	J	AB	Silicon,1N4004
D688,689	VHD1N4004//-1	J	AB	Silicon,1N4004
D720~723	VHD1N4148//-1	J	AA	Silicon,1N4148
D801~808	VHD1N4148//-1	J	AA	Silicon,1N4148
D881	VHD1N4004//-1	J	AB	Silicon,1N4004
D891~893	VHD1N4004//-1	J	AB	Silicon,1N4004
D901~904	VHD1N4148//-1	J	AA	Silicon,1N4148
LED701~703	VHPLP3052D+-1	J	AN	LED,LP3052D
LED801	VHPLP99B+++-1	J	AM	LED,LP99B
VD301	VHCSVC348S/-1	J	AK	Variable Capacitance,SVC348S
ZD351	VHEDZ5R1BSB-1	J	AC	Zener,5.1V,DZ5.1BSB
ZD601	VHEDZ130BSA-1	J	AC	Zener,13V,DZ130BSA
ZD602	VHEDZ8R2BSC-1	J	AB	Zener,8.2V,DZ8.2BSC
ZD701	VHEDZ3R3BSB-1	J	AB	Zener,3.3V,DZ3.3BSB
ZD801	VHEDZ5R1BSB-1	J	AC	Zener,5.1V,DZ5.1BSB
ZD802	VHEDZ3R9BSB-1	J	AC	Zener,3.9V,DZ3.9BSB
FILTERS				
CF301,302	RFILF0072AFZZ	J	AG	FM IF
CF351	RFILF0003AWZZ	J	AK	FM IF
CF352	RFILA0003SJZZ	J	AF	AM IF
TRANSFORMERS				
T302	RCILA0007SJZZ	J	AG	AM Antenna
T306	RCILB0009SJZZ	J	AG	AM OSC.
T351	RCILI0004SJZZ	J	AF	AM IF
⚠ T651	RTRNP0085SJZZ	J	AY	Power Transformer (Main)
⚠ T681	RTRNP0057SJZZ	J	AL	Power Transformer (Sub)
COILS				
L151	VP-MK331K0000	J	AB	330 µH,Choke
L201,202	RCILZ0024AWZZ	J	AC	3 µH,Choke
L203~205	VP-DH100K0000	J	AB	10 µH,Choke
L341	RBLN-0001AWZZ	J	AD	Balun
L342	VP-DH2R2K0000	J	AB	2.2 µH,Peaking
L351,352	VP-DH101K0000	J	AB	100 µH,Choke
L353	VP-DH102K0000	J	AB	1 mH,Choke
L354	RFILL0001AWZZ	J	AE	Low Pass Filter
L401	VP-DH2R2K0000	J	AB	2.2 µH,Peaking
L521	VP-DH2R2K0000	J	AB	2.2 µH,Peaking
L701,702	VP-DH100K0000	J	AB	10 µH,Choke
L801~803	VP-DH2R2K0000	J	AB	2.2 µH,Peaking
L804	VP-XHR82K0000	J	AC	0.82 µH
L805	VP-XH2R2K0000	J	AB	2.2 µH,Choke
L851~853	RCILC0353AFZZ	J	AB	Tip Solid Induction,100mA
⚠ LF651	RCILZ0005SJZZ	J		Line Filter
VARIABLE RESISTOR				
VR351	RVR-M0026AWZZ	J	AC	10 kohm (B),Semi-VR
VIBRATORS				
X351	RCRM-0007SJZZ	J	AG	VCO,456 kHz
X352	RCRSP0006SJZZ	J	AF	Crystal,4.5 MHz
X521	RCRSP0005SJZZ	J	AF	Crystal,4.332 MHz
X701	RCRM-0008SJZZ	J	AG	Ceramic,8 MHz
X702	RCRSP0007SJZZ	J	AE	Crystal,32.768 kHz
X801	RCRSP0002SJZZ	J	AL	Crystal,16.93 MHz
CAPACITORS				
C101,102	VCKYCY1HB102K	J	AA	0.001 µF,50V
C103,104	VCKYCY1HB331K	J	AA	330 pF,50V
C105,106	VCKYCY1HB271K	J	AA	270 pF,50V
C107,108	RC-GZA476AF1C	J	AB	47 µF,16V,Electrolytic
C109,110	VCQYKA1HM153J	J	AB	0.015 µF,50V,Mylar
C111,112	RC-GZA106AF1C	J	AB	10 µF,16V,Electrolytic
C113,114	RC-GZA475AF1E	J	AB	4.7 µF,25V,Electrolytic

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C115,116	VCKYCY1HB122K	J	AA	0.0012 µF,50V
C117	RC-GZA106AF1C	J	AB	10 µF,16V,Electrolytic
C118	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C121,122	VCCSCY1HL820J	J		82 pF,50V
C123	RC-GZA225AF1H	J	AB	2.2 µF,50V,Electrolytic
C125	RC-GZA107AF1E	J	AB	100 µF,25V,Electrolytic
C126	RC-GZA226AF1C	J	AB	22 µF,16V,Electrolytic
C129	RC-GZA475AF1E	J	AB	4.7 µF,25V,Electrolytic
C130	RC-EZD475AF1E	J	AB	4.7 µF,25V,Electrolytic
C131	VCKYBT1HB821K	J	AA	820 pF,50V
C151	VCKYCY1HB181K	J	AB	180 pF,50V
C152	VCKYCY1HB102K	J	AA	0.001 µF,50V
C153	VCQPKA2AA392J	J	AB	0.0039 µF,100V,Polypropylene
C154	VCQYKA1HM273J	J	AB	0.027 µF,50V,Mylar
C155	RC-GZA107AF1C	J	AB	100 µF,16V,Electrolytic
C156	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C201	RC-EZD336AF1C	J	AB	33 µF,16V,Electrolytic
C203,204	RC-GZA106AF1H	J	AB	10 µF,50V,Electrolytic
C205,206	VCKYPA1HB152K	J	AA	0.0015 µF,50V
C207,208	RC-GZA106AF1H	J	AB	10 µF,50V,Electrolytic
C209,210	VCCCPA1HH3R0C	J	AA	3 pF (CH),50V
C211,212	RC-GZA106AF1H	J	AB	10 µF,50V,Electrolytic
C213,214	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C215,216	RC-GZA107AF1H	J	AC	100 µF,50V,Electrolytic
C217,218	VCKYPA1EF223Z	J		0.022 µF,25V
C219~222	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C223,224	VCKYPA1HB222K	J	AA	0.0022 µF,50V
C225,226	VCKYPA1HB821K	J	AA	820 pF,50V
C230	RC-EZD476AF1E	J	AC	47 µF,25V,Electrolytic
C231,232	RC-GZW228AF1V	J	AF	2200 µF,35V,Electrolytic
C233~236	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C241	RC-GZA335AF1C	J	AB	3.3 µF,16V,Electrolytic
C251,252	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C301	VCKYCY1EF123Z	J		0.012 µF,25V
C302	VCKYCY1HB102K	J	AA	0.001 µF,50V
C329	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C330	VCCCPA1HH8R0D	J	AA	8 pF (CH),50V
C331	VCKYCY1EF473Z	J	AB	0.047 µF,25V
C332	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C334	VCCUPA1HJ270J	J	AA	27 pF (UJ),50V
C335	VCKYCY1HB561K	J	AA	560 pF,50V
C337	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C341	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C343	VCCSCY1HL330J	J	AD	33 pF,50V
C345~347	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C348	RC-GZA107AF1C	J	AB	100 µF,16V,Electrolytic
C349	VCKYCY1HB102K	J	AA	0.001 µF,50V
C350,351	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C352	RC-GZA106AF1C	J	AB	10 µF,16V,Electrolytic
C353,354	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C355	VCCSCY1HL220J	J	AD	220 pF,50V
C356	VCKYCY1HB102K	J	AA	0.001 µF,50V
C357	RC-GZA225AF1H	J	AB	2.2 µF,50V,Electrolytic
C358	RC-GZA105AF1H	J	AB	1 µF,50V,Electrolytic
C360,361	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C362	RC-GZA335AF1H	J	AB	3.3 µF,50V,Electrolytic
C363	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C364	RC-GZA475AF1E	J	AB	4.7 µF,25V,Electrolytic
C365	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C366	VCKYCY1HB102K	J	AA	0.001 µF,50V
C367,368	RC-GZA105AF1H	J	AB	1 µF,50V,Electrolytic
C369	VCCSCY1HL560J	J	AD	56 pF,50V
C370	RC-GZA105AF1H	J	AB	1 µF,50V,Electrolytic
C371,372	RC-EZD105AF1H	J	AB	1 µF,50V,Electrolytic
C373,374	VCTYPA1CX273K	J	AA	0.027 µF,16V
C380	RC-GZA106AF1C	J	AB	10 µF,16V,Electrolytic
C381	VCCCCY1HH120J	J	AA	12 pF (CH),50V
C382	VCCCCY1HH150J	J	AA	15 pF (CH),50V
C383	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C384	VCKYCY1HB102K	J	AA	0.001 µF,50V
C385	VCKYPA1HF103Z	J	AB	0.01 µF,50V
C386	VCKYPA1HB331K	J	AA	330 pF,50V
C387	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C391	RC-GZA476AF1C	J	AB	47 µF,16V,Electrolytic
C392	VCKYCY1HB102K	J	AA	0.001 µF,50V
C393	RC-GZA105AF1H	J	AB	1 µF,50V,Electrolytic
C394	RC-GZA476AF1C	J	AB	47 µF,16V,Electrolytic
C395	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C396	RC-GZA107AF1A	J	AB	100 µF,10V,Electrolytic
C397	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C398	RC-GZA107AF1A	J	AB	100 µF,10V,Electrolytic
C399	VCKYPA1HF473Z	J	AB	0.047 µF,50V

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C401,402	RC-GZA106AF1C	J	AB	10 µF,16V,Electrolytic
C403	RC-EZD106AF1C	J	AB	10 µF,16V,Electrolytic
C404~408	RC-GZA106AF1C	J	AB	10 µF,16V,Electrolytic
C413	VCKYPA1HB472K	J	AB	0.0047 µF,50V
C415	RC-EZD106AF1C	J	AB	10 µF,16V,Electrolytic
C416	RC-GZA106AF1C	J	AB	10 µF,16V,Electrolytic
C417	RC-EZD225AF1H	J	AB	2.2 µF,50V,Electrolytic
C418	RC-GZA225AF1H	J	AB	2.2 µF,50V,Electrolytic
C419,420	VCKYCY1HB272K	J	AA	0.0027 µF,50V
C421~424	RC-QZA104AFYJ	J	AC	0.1 µF,50V,Mylar
C425	RC-EZD105AF1H	J	AB	1 µF,50V,Electrolytic
C426	RC-GZA105AF1H	J	AB	1 µF,50V,Electrolytic
C429	RC-EZD336AF1C	J	AB	33 µF,16V,Electrolytic
C430	RC-EZD107AF1C	J	AC	100 µF,16V,Electrolytic
C431~433	VCKYCY1HB221K	J	AA	220 pF,50V
C461,462	VCKYCY1HB562K	J	AA	0.0056 µF,50V
C463,464	RC-GZA105AF1H	J	AB	1 µF,50V,Electrolytic
C469	RC-GZA476AF1C	J	AB	47 µF,16V,Electrolytic
C471,472	VCKYCY1HB332K	J	AA	0.0033 µF,50V
C473,474	RC-GZA475AF1H	J	AB	4.7 µF,50V,Electrolytic
C475,476	RC-GZA105AF1H	J	AB	1 µF,50V,Electrolytic
C478	RC-GZA107AF1C	J	AB	100 µF,16V,Electrolytic
C521	RC-GZA106AF1C	J	AB	10 µF,16V,Electrolytic
C522	VCKYCY1HB331K	J	AA	330 pF,50V
C523	VCKYCY1EF104Z	J	AA	0.1 µF,25V
C524	VCKYCY1HB561K	J	AA	560 pF,50V
C525,526	VCCCCY1HH220J	J	AA	22 pF (CH),50V
C527	VCKYCY1EF104Z	J	AA	0.1 µF,25V
C535	RC-GZA476AF1C	J	AB	47 µF,16V,Electrolytic
C536	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C537	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C601	RC-GZV477AF1E	J	AC	470 µF,25V,Electrolytic
C602	RC-GZA107AF1E	J	AB	100 µF,25V,Electrolytic
C603,604	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C605	RC-GZA106AF1C	J	AB	10 µF,16V,Electrolytic
C606	RC-GZW478AF1E	J	AG	4700 µF,25V,Electrolytic
C607	RC-GZV477AF1E	J	AC	470 µF,25V,Electrolytic
C608	RC-GZA107AF1E	J	AB	100 µF,25V,Electrolytic
C609	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C610	RC-GZA106AF1C	J	AB	10 µF,16V,Electrolytic
C651	VCFYFA1HA104J	J	AC	0.1 µF,50V,Thin Film
C654	VCFYFA1HA104J	J	AC	0.1 µF,50V,Thin Film
⚠ C657~660	VCFYFA1HA104J	J	AC	0.1 µF,50V,Thin Film
C661	VCKYPA1HB102K	J	AA	0.001 µF,50V
C665	VCFYFA1HA473J	J	AB	0.047 µF,50V,Thin Film
C681,682	VCFYFA1HA473J	J	AB	0.047 µF,50V,Thin Film
C683	RC-GZV228AF1C	J	AG	2200 µF,16V,Electrolytic
C688	VCFYFA1HA473J	J	AB	0.047 µF,50V,Thin Film
C689	RC-GZA474AF1H	J	AA	0.47 µF,50V,Electrolytic
C701,702	VCCCCY1HH220J	J	AA	22 pF (CH),50V
C703	VCKYCY1EF104Z	J	AA	0.1 µF,25V
C704	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C705	VCKYPA1HF103Z	J	AB	0.01 µF,50V
C710	VCKYCY1EB103K	J	AA	0.01 µF,25V
C711	RC-GZA335AF1H	J	AB	3.3 µF,50V,Electrolytic
C712	VCKYCY1EB103K	J	AA	0.01 µF,25V
C713	RC-GZA106AF1C	J	AB	10 µF,16V,Electrolytic
C714	VCKYCY1HB561K	J	AA	560 pF,50V
C715	RC-EZD107AF1A	J	AB	100 µF,10V,Electrolytic
C717	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C751	VCKYPA1HF223Z	J		0.022 µF,50V
C801	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C802	RC-GZA476AF1C	J	AB	47 µF,16V,Electrolytic
C803	RC-GZA337AF1A	J	AB	330 µF,10V,Electrolytic
C804	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C805	RC-GZA107AF1A	J	AB	100 µF,10V,Electrolytic
C806	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C807,808	RC-GZA107AF1A	J	AB	100 µF,10V,Electrolytic
C809	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C810,811	VCKYCY1CB104K	J	AB	0.1 µF,16V
C812	RC-GZA107AF1A	J	AB	100 µF,10V,Electrolytic
C813	VCCCCY1HH1R5C	J	AA	1.5 pF (CH),50V
C814	VCKYCY1HB682K	J	AA	0.0068 µF,50V
C815,816	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C817	VCCCCY1HH220J	J	AA	22 pF (CH),50V
C818	VCKYCY1HF104Z	J	AB	0.1 µF,50V
C819,820	RC-GZA107AF1A	J	AB	100 µF,10V,Electrolytic
C821	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C822	RC-GZA107AF1A	J	AB	100 µF,10V,Electrolytic
C823,824	VCKYCY1HF104Z	J	AB	0.1 µF,50V
C825	RC-GZA476AF1A	J	AB	47 µF,10V,Electrolytic
C826	VCKYCY1CB473K	J	AA	0.047 µF,16V

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C827	VCCCCY1HH471J	J	AA	470 pF (CH),50V
C828	VCKYCY1HB103K	J	AA	0.01 µF,50V
C829	VCKYCY1EB333K	J	AC	0.033 µF,25V
C830	VCCCCY1HH471J	J	AA	470 pF (CH),50V
C831	VCKYCY1HB153K	J	AA	0.015 µF,50V
C832	VCKYCY1HB103K	J	AA	0.01 µF,50V
C833	VCKYCY1HB272K	J	AA	0.0027 µF,50V
C834	VCKYCY1CB473K	J	AA	0.047 µF,16V
C835	VCCCCY1HH470J	J	AA	47 pF (CH),50V
C836	VCKYCY1EB333K	J	AC	0.033 µF,25V
C837,838	VCKYCY1CB473K	J	AA	0.047 µF,16V
C839	RC-GZA476AF1A	J	AB	47 µF,10V,Electrolytic
C840	VCKYCY1EB104K	J	AD	0.1 µF,25V
C841	VCKYCY1HF104Z	J	AB	0.1 µF,50V
C843	VCKYCY1CB473K	J	AA	0.047 µF,16V
C844	VCKYPA1HB101K	J	AA	100 pF,50V
C845	RC-EZD476AF1C	J	AC	47 µF,16V,Electrolytic
C846	RC-GZA107AF1A	J	AB	100 µF,10V,Electrolytic
C847	VCCCCY1HH100J	J	AA	10 pF (CH),50V
C848,849	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C850,851	RC-GZA476AF1A	J	AB	47 µF,10V,Electrolytic
C852	VCCCCY1HH150J	J	AA	15 pF (CH),50V
C853,854	RC-GZA106AF1A	J	AC	10 µF,10V,Electrolytic
C855	VCCCCY1HH120J	J	AA	12 pF (CH),50V
C856,857	RC-GZA107AF1A	J	AB	100 µF,10V,Electrolytic
C858,859	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C860	VCKYCY1HF104Z	J	AB	0.1 µF,50V
C861,862	VCKYCY1HB471K	J	AA	470 pF,50V
C864	RC-GZA107AF1A	J	AB	100 µF,10V,Electrolytic
C865	VCQYKA1HM222J	J	AB	0.0022 µF,50V,Mylar
C867	VCKYCY1CB104K	J	AB	0.1 µF,16V
C868,869	RC-GZA107AF1A	J	AB	100 µF,10V,Electrolytic
C870	VCKYCY1HF223Z	J		0.022 µF,50V
C871	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C872	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C880	RC-GZA476AF1C	J	AB	47 µF,16V,Electrolytic
C881	RC-GZA106AF1C	J	AB	10 µF,16V,Electrolytic
C891	VCKYPA1HB152K	J	AA	0.0015 µF,50V
C901	VCKYCY1HB102K	J	AA	0.001 µF,50V
C902	RC-GZA335AF1H	J	AB	3.3 µF,50V,Electrolytic
C903	RC-GZA107AF1E	J	AB	100 µF,25V,Electrolytic
C904,905	VCKYCY1HF223Z	J		0.022 µF,50V

RESISTORS

	VRS-CY1JB000J	J	AA	0 ohm,Jumper,0.8×1.55mm,Green
R7A0,7A1	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R7A2	VRS-CY1JB104J	J	AA	100 kohm,1/16W
R7A3	VRD-ST2EE101J	J	AA	100 ohm,1/4W
R7A4	VRS-CY1JB121J	J	AA	120 ohms,1/16W
R7A5	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R7A6,7A7	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R7A8	VRS-CY1JB820J	J	AA	82 ohms,1/16W
R7A9	VRS-CY1JB332J	J	AA	3.3 kohms,1/16W
R7B0	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R101,102	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R103,104	VRS-CY1JB121J	J	AA	120 ohms,1/16W
R105,106	VRS-CY1JB154J	J	AA	150 kohms,1/16W
R107,108	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R109,110	VRS-CY1JB392J	J	AA	3.9 kohms,1/16W
R111,112	VRD-ST2EE821J	J	AA	820 ohms,1/4W
R113,114	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R115,116	VRS-CY1JB153J	J	AA	15 kohms,1/16W
R117,118	VRS-CY1JB333J	J	AA	33 kohms,1/16W
R119,120	VRS-CY1JB101J	J	AA	100 ohm,1/16W
R121~124	VRS-CY1JB472J	J	AA	4.7 kohms,1/16W
R125	VRS-CY1JB104J	J	AA	100 kohm,1/16W
R126	VRS-CY1JB562J	J	AA	5.6 kohms,1/16W
R131,132	VRS-CY1JB472J	J	AA	4.7 kohms,1/16W
R133	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R134	VRS-CY1JB104J	J	AA	100 kohm,1/16W
R138	VRD-ST2EE331J	J	AA	330 ohms,1/4W
R139	VRD-ST2EE272J	J	AA	2.7 kohms,1/4W
R140	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R141	VRD-ST2EE331J	J	AA	330 ohms,1/4W
R151	VRS-CY1JB473J	J	AA	47 kohms,1/16W
R152	VRS-CY1JB104J	J	AA	100 kohm,1/16W
R153,154	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R155	VRD-ST2EE560J	J	AA	56 ohms,1/4W
R156,157	VRD-ST2EE151J	J	AA	150 ohms,1/4W
R159,160	VRS-CY1JB562J	J	AA	5.6 kohms,1/16W

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
R201,202	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R203,204	VRD-ST2EE103J	J	AA	10 kohm,1/4W
R205	VRD-ST2EE332J	J	AA	3.3 kohms,1/4W
R206	VRD-ST2EE682J	J	AA	6.8 kohms,1/4W
R207,208	VRD-ST2CD393J	J	AA	39 kohms,1/6W
R209,210	VRD-ST2EE102J	J	AA	1 kohm,1/4W
R211,212	VRD-ST2EE471J	J	AA	470 ohms,1/4W
R213,214	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R215,216	VRD-ST2CD563J	J	AA	56 kohms,1/6W
⚠ R217,218	VRG-ST2EM101J	J		100 ohm,1/4W,Fusible
R219,220	VRS-VV3AAR20J	J	AB	0.2 ohms,1W
R221~224	VRD-ST2EE472J	J	AA	4.7 kohms,1/4W
R225,226	VRD-ST2EE563J	J	AA	56 kohms,1/4W
R227,228	VRD-ST2EE331J	J	AA	330 ohms,1/4W
R229,230	VRD-ST2EE6R8J	J	AA	6.8 ohms,1/4W
R231	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R232	VRD-ST2CD223J	J	AA	22 kohms,1/6W
R233,234	VRD-RT2HD272J	J	AA	2.7 kohms,1/2W
R235,236	VRD-ST2EE6R8J	J	AA	6.8 ohms,1/4W
R323	VRS-CY1JB683J	J	AA	68 kohms,1/16W
R336	VRD-ST2CD562J	J	AA	5.6 kohms,1/6W
R343	VRD-ST2CD181J	J	AA	180 ohms,1/6W
R344	VRS-CY1JB681J	J	AA	680 ohms,1/16W
R345	VRS-CY1JB472J	J	AA	4.7 kohms,1/16W
R346	VRD-ST2CD331J	J	AA	330 ohms,1/6W
R347	VRS-CY1JB682J	J	AA	6.8 kohms,1/16W
R348	VRS-CY1JB681J	J	AA	680 ohms,1/16W
R349	VRS-CY1JB330J	J	AA	33 ohms,1/16W
R350	VRS-CY1JB272J	J	AA	2.7 kohms,1/16W
R351	VRS-CY1JB562J	J	AA	5.6 kohms,1/16W
R352	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R353	VRS-CY1JB271J	J	AA	270 ohms,1/16W
R355	VRS-CY1JB332J	J	AA	3.3 kohms,1/16W
R356	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R357	VRS-CY1JB474J	J	AA	470 kohms,1/16W
R358	VRS-CY1JB822J	J	AA	8.2 kohms,1/16W
R359	VRS-CY1JB182J	J	AA	1.8 kohms,1/16W
R360	VRS-CY1JB472J	J	AA	4.7 kohms,1/16W
R361,362	VRS-CY1JB562J	J	AA	5.6 kohms,1/16W
R363	VRD-ST2CD682J	J	AA	6.8 kohms,1/6W
R364	VRS-CY1JB682J	J	AA	6.8 kohms,1/16W
R365	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R366	VRS-CY1JB222J	J	AA	2.2 kohms,1/16W
R369A	VRS-CY1JB680J	J	AA	68 ohms,1/16W
R369B	VRS-CY1JB820J	J	AA	82 ohms,1/16W
R371~374	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R376	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R377	VRD-ST2CD562J	J	AA	5.6 kohms,1/6W
R379	VRS-CY1JB222J	J	AA	2.2 kohms,1/16W
R380	VRD-ST2CD152J	J	AA	1.5 kohms,1/6W
R381	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R382	VRD-ST2EE331J	J	AA	330 ohms,1/4W
R383	VRS-CY1JB562J	J	AA	5.6 kohms,1/16W
R384	VRD-ST2CD682J	J	AA	6.8 kohms,1/6W
R385	VRD-ST2CD562J	J	AA	5.6 kohms,1/6W
R386	VRD-ST2EE331J	J	AA	330 ohms,1/4W
R387	VRD-ST2CD562J	J	AA	5.6 kohms,1/6W
R391,392	VRD-ST2EE391J	J	AA	390 ohms,1/4W
R393	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R395	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R401,402	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R405,406	VRS-CY1JB273J	J	AA	27 kohms,1/16W
R407,408	VRS-CY1JB272J	J	AA	2.7 kohms,1/16W
R415	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R416~418	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R419~421	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R422~425	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R437,438	VRS-CY1JB682J	J	AA	6.8 kohms,1/16W
R439,440	VRS-CY1JB392J	J	AA	3.9 kohms,1/16W
R441	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R442	VRD-ST2EE103J	J	AA	10 kohm,1/4W
R461,462	VRD-ST2CD822J	J	AA	8.2 kohms,1/6W
R463,464	VRS-CY1JB104J	J	AA	100 kohm,1/16W
R465,466	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R467	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R468	VRD-ST2EE331J	J	AA	330 ohms,1/4W
R469,470	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R471	VRS-CY1JB272J	J	AA	2.7 kohms,1/16W
R472	VRD-ST2CD272J	J	AA	2.7 kohms,1/6W
R473~476	VRS-CY1JB123J	J	AA	12 kohms,1/16W
R477,478	VRD-ST2CD123J	J	AA	12 kohms,1/6W
R521	VRD-ST2CD473J	J	AA	47 kohms,1/6W

NO.	PART CODE	★	PRICE RANK	DESCRIPTION
R528,529	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R532	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R533,534	VRS-CY1JB563J	J	AA	56 kohms,1/16W
R601	VRD-ST2EE821J	J	AA	820 ohms,1/4W
R602	VRD-ST2EE101J	J	AA	100 ohm,1/4W
R603	VRD-ST2CD333J	J	AA	33 kohms,1/6W
R604	VRD-ST2EE470J	J	AA	47 ohms,1/4W
R605	VRD-ST2EE223J	J	AA	22 kohms,1/4W
R606	VRD-ST2EE470J	J	AA	47 ohms,1/4W
R607	VRD-ST2EE223J	J	AA	22 kohms,1/4W
R608	VRD-ST2CD821J	J	AA	820 ohms,1/6W
R609	VRD-ST2EE101J	J	AA	100 ohm,1/4W
R610	VRD-ST2CD333J	J	AA	33 kohms,1/6W
R611	VRD-ST2EE470J	J	AA	47 ohms,1/4W
R612	VRD-ST2EE223J	J	AA	22 kohms,1/4W
R685	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R686	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R702	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R705	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R706	VRS-CY1JB562J	J	AA	5.6 kohms,1/16W
R707	VRS-CY1JB392J	J	AA	3.9 kohms,1/16W
R708	VRS-CY1JB272J	J	AA	2.7 kohms,1/16W
R709	VRS-CY1JB222J	J	AA	2.2 kohms,1/16W
R710	VRS-CY1JB122J	J	AA	1.2 kohms,1/16W
R711	VRS-CY1JB272J	J	AA	2.7 kohms,1/16W
R720	VRS-CY1JB122J	J	AA	1.2 kohms,1/16W
R721,722	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R723	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R724	VRS-CY1JB123J	J	AA	12 kohms,1/16W
R725	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R727	VRS-CY1JB473J	J	AA	47 kohms,1/16W
R728	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R729	VRS-CY1JB473J	J	AA	47 kohms,1/16W
R730,731	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R732~734	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R735~741	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R742,743	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R744	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R745~748	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R749	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R750	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R751	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R752~756	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R758	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R759	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R760~768	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R769	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R770	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R771~773	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R774	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R775,776	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R777	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R778~781	VRS-CY1JB473J	J	AA	47 kohms,1/16W
R782	VRS-CY1JB333J	J	AA	33 kohms,1/16W
R783	VRD-ST2CD333J	J	AA	33 kohms,1/6W
R784	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R785	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R786,787	VRS-CY1JB473J	J	AA	47 kohms,1/16W
R789	VRS-CY1JB473J	J	AA	47 kohms,1/16W
R790	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R791	VRS-CY1JB472J	J	AA	4.7 kohms,1/16W
R792	VRS-CY1JB473J	J	AA	47 kohms,1/16W
R793	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R795	VRS-CY1JB473J	J	AA	47 kohms,1/16W
R796	VRD-ST2EE821J	J	AA	820 ohms,1/4W
R797	VRS-CY1JB222J	J	AA	2.2 kohms,1/16W
R799	VRD-ST2EE221J	J	AA	220 ohms,1/4W
R801	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R802	VRS-CY1JB823J	J	AA	82 kohms,1/16W
R803	VRD-ST2CD823J	J	AA	82 kohms,1/6W
R804	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R805,806	VRS-CY1JB823J	J	AA	82 kohms,1/16W
R807,808	VRS-CY1JB222J	J	AA	2.2 kohms,1/16W
R809	VRD-ST2EE100J	J	AA	10 ohm,1/4W
R810	VRS-CY1JB222J	J	AA	2.2 kohms,1/16W
R811	VRD-ST2EE4R7J	J	AA	4.7 ohms,1/4W
R812	VRS-CY1JB473J	J	AA	47 kohms,1/16W
R813	VRD-ST2CD152J	J	AA	1.5 kohms,1/6W
R815	VRD-ST2CD821J	J	AA	820 ohms,1/6W
R816	VRS-CY1JB101J	J	AA	100 ohm,1/16W
R817	VRS-CY1JB473J	J	AA	47 kohms,1/16W
R818	VRS-CY1JB103J	J	AA	10 kohm,1/16W

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
R819	VRD-ST2CD333J	J	AA	33 kohms,1/6W
R820	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R821	VRD-ST2CD822J	J	AA	8.2 kohms,1/6W
R824	VRS-CY1JB473J	J	AA	47 kohms,1/16W
R825	VRS-CY1JB222J	J	AA	2.2 kohms,1/16W
R826	VRD-ST2CD101J	J	AA	100 ohm,1/6W
R827	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R828	VRS-CY1JB153J	J	AA	15 kohms,1/16W
R829	VRS-CY1JB473J	J	AA	47 kohms,1/16W
R831	VRS-CY1JB472J	J	AA	4.7 kohms,1/16W
R832	VRS-CY1JB154J	J	AA	150 kohms,1/16W
R833	VRS-CY1JB562J	J	AA	5.6 kohms,1/16W
R834	VRS-CY1JB332J	J	AA	3.3 kohms,1/16W
R835	VRD-ST2CD394J	J	AA	390 kohms,1/6W
R836	VRS-CY1JB182J	J	AA	1.8 kohms,1/16W
R837	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R838	VRS-CY1JB392J	J	AA	3.9 kohms,1/16W
R839	VRS-CY1JB101J	J	AA	100 ohm,1/16W
R840	VRS-CY1JB105J	J	AA	1 Mohm,1/16W
R841~844	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R845	VRS-CY1JB154J	J	AA	150 kohms,1/16W
R846	VRS-CY1JB104J	J	AA	100 kohm,1/16W
R847	VRS-CY1JB683J	J	AA	68 kohms,1/16W
R848~854	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R855,856	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R857,858	VRS-CY1JB182J	J	AA	1.8 kohms,1/16W
R859	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R860	VRD-ST2EE820J	J	AA	82 ohms,1/4W
R861,862	VRS-CY1JB103J	J	AA	10 kohm,1/16W
⚠ R863	VRG-ST2EM100J	J	AC	10 ohm,1/4W,Fusible
R864	VRD-ST2EE101J	J	AA	100 ohm,1/4W
R865	VRD-ST2EE821J	J	AA	820 ohms,1/4W
R880	VRD-ST2EE223J	J	AA	22 kohms,1/4W
R881	VRD-ST2CD332J	J	AA	3.3 kohms,1/6W
R882	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R883	VRD-ST2EE223J	J	AA	22 kohms,1/4W
R884	VRD-ST2EE474J	J	AA	470 kohms,1/4W
R885	VRS-VV3AA101J	J		100 ohm,1W
R886	VRD-ST2EE273J	J	AA	27 kohms,1/4W
R887	VRD-ST2EE332J	J	AA	3.3 kohms,1/4W
R891,892	VRD-ST2CD104J	J	AA	100 kohm,1/6W
R893	VRD-ST2EE103J	J	AA	10 kohm,1/4W
R894	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W
R901	VRD-ST2CD152J	J	AA	1.5 kohms,1/6W
R902	VRD-ST2CD563J	J	AA	56 kohms,1/6W
R903	VRS-CY1JB473J	J	AA	47 kohms,1/16W
R904	VRS-CY1JB271J	J	AA	270 ohms,1/16W
R905	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R906	VRD-ST2CD152J	J	AA	1.5 kohms,1/6W
R907	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R909	VRS-CY1JB183J	J	AA	18 kohms,1/16W
R910	VRS-CY1JB333J	J	AA	33 kohms,1/16W

OTHER CIRCUITRY PARTS

CFW301	QCNWN0450SJZZ	J		Lead Wire,1Pin
CFW701/A	QCNWN0427SJZZ	J		Flat Wire,2Pin
CFW706A/B	QCNWN0429SJZZ	J		Flat Wire,5Pin
CNP101	QCNCM999JAFZZ	J		Plug,9Pin
CNP301	QCNCM010PAWZZ	J	AD	Plug,14Pin
CNP401	QCNCM999CAFZZ	J	AG	Plug,3Pin
CNP651	QCNCM037ESJZZ	J	AD	Plug,5Pin
⚠ CNP681	QCNCM017BSJZZ	J	AD	Plug,3Pin
CNP701	QCNCM998CAFZZ	J	AE	Plug,3Pin
CNP702	QCNCM999NAFZZ	J	AC	Plug,13Pin
CNP703	QCNCM999HAFZZ	J	AD	Plug,8Pin
CNP703A	QCNCM035FSJZZ	J	AD	Plug,6Pin
CNP704	QCNCM999KAFZZ	J		Plug,10Pin
CNP705	QCNCM999GAFZZ	J		Plug,7Pin
CNP751	QCNCM999BAFZZ	J	AD	Plug,2Pin
CNP801	QCNCW011RSJZZ	J		Plug,16Pin
CNP804	QCNCM999CAFZZ	J	AG	Plug,3Pin
CNP881	QCNCM999BAFZZ	J	AD	Plug,2Pin
CNP902C	QCNCM998BAFZZ	J	AC	Plug,2Pin
CNP909	QCNCM998BAFZZ	J	AC	Plug,2Pin
CNS301	QCNCW010PAWZZ	J	AE	Socket,14Pin
CNW101	QCNWN0430SJZZ	J		Connector Ass'y,9Pin
CNW401	QCNWN0417SJZZ	J		Connector Ass'y,3-3Pin
CNW701	QCNWN0421SJZZ	J		Connector Ass'y,3-3Pin
CNW702	QCNWN0422SJZZ	J		Connector Ass'y,13-13Pin
CNW703	QCNWN0423SJZZ	J		Connector Ass'y,8-8Pin

NO.	PART CODE	★	PRICE RANK	DESCRIPTION
CNW704	QCNWN0424SJZZ	J		Connector Ass'y,10-10Pin
CNW705	QCNWN0425SJZZ	J		Connector Ass'y,7-7Pin
CNW751	QCNWN0459SJZZ	J		Connector Ass'y,2-2Pin
CNW801	QCNWN0420SJZZ	J		Flat Cable,16Pin
CNW802	QCNWN0419SJZZ	J		Connector Ass'y,6-6Pin
CNW804	QCNWN0431SJZZ	J		Connector Ass'y,3-3Pin
CNW901	QCNWN0418SJZZ	J		Connector Ass'y,7-7Pin
CNW902/A/B	QCNWN0426SJZZ	J		Connector Ass'y,6-2-2-2Pin
CNW909	QCNWN0435SJZZ	J		Flat Cable,2Pin with Lug
⚠ F651	QFS-D322CAWNI	J	AC	Fuse,T3.15A L 250V
⚠ F652	QFS-D322CAWNI	J	AC	Fuse,T3.15A L 250V
⚠ F653	QFS-D132CAWNI	J		Fuse,T1.25A L 250V
FE301	RTUNS0016AWZZ	J	AX	FM Front End
J801	VHPIF11381+-1	J	AM	Jack,CD Digital Output
JK601	QJAKM0001SJZZ	J	AG	Jack,Headphone
LCD701	RV-LX0016SJZZ	J	AS	FL Display
M701	RMOTV0408SJM4	J		Motor with Chassis [Spindle]
M702	RMOTV0409AFM1	J	AN	Motor with Gear [Sled]
M801(243-6)	RMOTV0004SJZZ	J	AL	Motor [CD Lid]
M802	RMOTV0010SJZZ	J		Motor,Air Cooling Fan
M901(212-9)	9GD192112344	J	AY	Motor with Pulley [Tape]
RLY201	RRLYD0014AWZZ	J	AK	Relay
⚠ RLY601	RRLYD0004SJZZ	J	AG	Relay
RX701	VHLN61V380A-1	J	AN	Remote Sensor
SO301	QTANC9003SJZZ	J	AF	Terminal,Antenna
SO401	QSOCJ0003SJZZ	J	AG	Socket,Video/AUX Input
SO601	QTANA0007SJZZ	J	AF	Terminal,Speaker
SO651	QSOCA0212AWZZ	J	AD	Socket AC Input
SOL901(212-4)	9GD19212118	J	AP	Solenoid Ass'y
SW702	QSW-F9001AWZZ	J	AE	Switch,Push Type [Pickup In]
SW709	QSW-K0004SJZZ	J	AD	Switch,Key Type [On/Stand-By]
SW710	QSW-K0004SJZZ	J	AD	Switch,Key Type [CD Lid Open/Close]
SW711	QSW-K0004SJZZ	J	AD	Switch,Key Type [Volume Down]
SW712	QSW-K0004SJZZ	J	AD	Switch,Key Type [Volume Up]
SW721	QSW-K0004SJZZ	J	AD	Switch,Key Type [Function]
SW722	QSW-K0004SJZZ	J	AD	Switch,Key Type [REW/Preset Down]
SW723	QSW-K0004SJZZ	J	AD	Switch,Key Type [FF/Preset Up]
SW724	QSW-K0004SJZZ	J	AD	Switch,Key Type [Bass/Treble]
SW725	QSW-K0004SJZZ	J	AD	Switch,Key Type [CD Stop/Clear/Tuning Down]
SW726	QSW-K0004SJZZ	J	AD	Switch,Key Type [Memory/Set]
SW727	QSW-K0004SJZZ	J	AD	Switch,Key Type [CD Play/Pause/Tuning Up]
SW728	QSW-K0004SJZZ	J	AD	Switch,Key Type [Rec/Pause]
SW802	QSW-B0001SJZZ	J	AG	Switch,Lever Type [CD Lid]
SW901(212-7)	9GD640101210	J	AE	Switch,Leaf Type [Fool Proof]
SW902(212-8)	9GD640101210	J	AE	Switch,Leaf Type [Cam]

CD MECHANISM PARTS

301	MLEVP1054AFZZ	J	AC	Rail,Guide
302	NGERH0586AFZZ	J	AC	Gear,Middle
303	NGERH0587AFZZ	J	AC	Gear,Drive
304	NSFTM0291AFFW	J	AD	Shaft,Guide
305	PCOVP1333AFSA	J	AF	Cover,Mechanism
306	PCUSG0001AWSA	J	AD	Cushion (Green)
307	PCUSG0004AWSA	J	AD	Cushion (Red-Brown)
⚠ 308	DCTRH8005SJ01	J	BA	Pickup Unit Ass'y
308- 1	————		—	Pickup Unit (Not Replacement Item)
308- 2	MSPRC0961AFZZ	J	AA	Spring,Rack
308- 3	NGERR0043AFZZ	J	AC	Gear,Rack
701	LX-WZ1070AFZZ	J	AA	Washer,ø1.5×ø3.8×0.25mm
702	XBBSD20P03000	J	AA	Screw,ø2×3mm
703	XBSSD26P06000	J	AA	Screw,ø2.6×6mm
704	XHBSD20P05000	J	AA	Screw,ø2×5mm
M701	RMOTV0408SJM4	J		Motor with Chassis [Spindle]
M702	RMOTV0409AFM1	J	AN	Motor with Gear [Sled]
SW702	QSW-F9001AWZZ	J	AE	Switch, Push Type [Pickup In]

CABINET PARTS

201	GCABA1079SJSA	J	AQ	Top Cabinet
202	GCABB1080SJSA	J	AN	Bottom Cabinet
203	GCOVA1018SJSA	J	AD	Cover,Remote Sensor
204	GFTAT1014SJSA	J	AN	CD Lid
205	HDECA1018SJSA	J	AS	Plate,Operation
206	HDECQ0079SJSA	J	AN	CD Window
207	HDECQ0080SJSA	J	AF	CD Illuminator
208	HDECQ0081SJSA	J	AE	LCD Window
209	HDECQ0082SJSA	J	AF	Plate,Decoration
210	HDECQ0083SJSA	J		Indicator Panel,LCD
211	JKNBZ0063SJSA	J	AF	Knob,Operation
212	CMECB0004SJ02	J		Tape Mechanism Ass'y
212- 1	94R19210703	J	AE	Belt,FF/REW
212- 2	9GD19210943	J	AG	Belt,Main
212- 3	94R192104309	J	AG	Pinch Roller Arm Ass'y
212- 4(SOL901)	9GD19212118	J	AP	Solenoid Ass'y
212- 5	9GD62161401	J	AN	Head,Erase
212- 6	94R62010111	J	AT	Head,Record/Playback
212- 7(SW901)	9GD640101210	J	AE	Switch,Leaf Type [Fool Proof]
212- 8(SW902)	9GD640101210	J	AE	Switch,Leaf Type [Cam]
212- 9(M901)	9GD192112344	J	AY	Motor with Pulley [Tape]
212-10(PWB-E)	9GD192121303	J	AZ	Tape Mechanism PWB Ass'y
212-11(PWB-F)	9GD192121304	J	AW	Tape Mechanism PWB Ass'y
213	LANGF0040SJFW	J		Bracket,Lid,Top
214	LANGF0041SJFW	J		Bracket,Lid,Side
215	LANGK0035SJFW	J		Bracket,Fan Motor
216	LCHSM0016SJFW	J		Chassis
217	LHLDM1005SJSB	J	AE	Stabilizer
218	LHLDW1001SJZZ	J	AD	Nylon Band
219	LHLDZ1048SJSA	J		Holder,Gear Box
220	LHLDZ1049SJSA	J		LCD Holder
221	LHLDZ1054SJSA	J		Holder,LED
222	LHLDZ1057SJSA	J		Holder,LED
223	MLEVP0009SJZZ	J		Lock Lever,Tape
224	MSPRD0019SJFJ	J		Spring,GND
225	MSPRK0001SJFJ	J	AC	Spring,Motor Fan Ring
226	NFANP0001SJSA	J	AG	Fan
227	PCOVS1003SJSA	J		Tape Mechanism Cover
228	PCOVS1004SJSA	J		PWB Shield Cover
229	PCOVS1005SJSA	J		PWB Shield Cover(Back)
230	PCOVS3008SJFW	J		PWB Shield
231	PCOVS7003SJFW	J		Shield Cover
232	PCUSG0003SJZZ	J	AC	Cushion
233	PCUSG0011SJSA	J		Cushion,Lid
234	PCUSG0013SJSA	J		Cushion,Leg
235	PMAGF0002AWZZ	J	AE	Magnet
236	PRDAR0055SJFW	J		Radiator,Main
237	PRDAR0056SJFW	J		Radiator,Sub
238	PSHEP0006SJSA	J		Sheet,Diffuse
239	PSPAI0001SJZZ	J	AB	Spacer
240	QFSHD0001AWZZ	J	AB	Holder,Fuse
241	TLABS0042SJZZ	J		Label,Laser
242	TSPC-0307SJZZ	J		Label,Specification [Except for U.K.]
242	TSPC-0314SJZZ	J	AE	Label,Specification [For U.K.]
243	CGERW0008SJ01	J	AP	Gear Box Ass'y
243- 1	LHLDZ1041SJSA	J		Lid,Gear Box
243- 2	LHLDZ1042SJSA	J		Gear Box
243- 3	NGERW0008SJSA	J		Gear,Drive
243- 4	NGERW0009SJSA	J		Worm Wheel
243- 5	NGERW0010SJSA	J		Worm Gear
243- 6	RMOTV0004SJZZ	J	AL	Motor [CD Lid],M801
601	LX-HZ0087AFFD	J	AA	Screw,ø3×8mm
603	LX-JZ0001SJFD	J	AA	Screw,ø3×10mm
604	LX-JZ0010AFFD	J	AA	Screw,ø3×10mm
605	XEBSD25P08000	J	AA	Screw,ø2.5×8mm
606	XEBSD25P10000	J	AA	Screw,ø2.5×10mm
607	XEBSD25P12000	J	AA	Screw,ø2.5×12mm
608	XEBSD30P10000	J	AA	Screw,ø3×10mm
609	XEBSF25P10000	J	AC	Screw,ø2.5×10mm
610	XHBSD20P03000	J	AA	Screw,ø2×3mm
611	XHBSD20P04000	J	AA	Screw,ø2×4mm
612	XHBSD20P06500	J		Screw,ø2×6.5mm
613	XHBSD40P06000	J	AA	Screw,ø4×6mm
614	XHBSF30P08000	J	AA	Screw,ø3×8mm
616	XJBSD30P08000	J	AA	Screw,ø3×8mm
617	XJBSD30P14000	J	AA	Screw,ø3×14mm
619	XJBSF30P10000	J	AA	Screw,ø3×10mm
620	XWHSD40-08000	J		Washer,ø4×8mm

SPEAKER BOX PARTS

901	GBOXS6002SJSA	J	BL	Box Ass'y
902	GLEGP0003SJSB	J		Leg
903	GWAKP1019SJ01	J	AS	Net Flame Ass'y
903- 1	————		—	Net Flame (Not Replacement Item)
903- 2	PGUMM0004SJSA	J	AG	Net Catcher
903- 3	HBDGA1002SJSB	J	AF	Badge,SHARP

NO.	PART CODE	★	PRICE RANK	DESCRIPTION
904	HPNLS1011SJ01	J	AQ	Front Panel Ass'y
904- 1	————		—	Front Panel (Not Replacement Item)
904- 2	HDECQ0072SJSA	J	AK	Ring Tweeter
904- 3	PDUC-0004SJZZ	J	AF	Duct Pipe
905	PSPAG0004SJZZ	J	AE	Gsket
906	QTANA9014SJZZ	J	AE	Terminal
907	TSPC-0300SJZZ	J		Specification Label
908	XTBSF30P12000	J	AA	Screw,ø3×12mm
909	XTBSF40P12000	J	AA	Screw,ø4×12mm
910	LX-MZ0004SJFN	J		Screw,Special
SP601,602	RSPA00018SJ6W	J	AW	Woofer
SP603,604	RSPA00019SJ6T	J	AM	Tweeter

ACCESSORIES/PACKING PARTS

1	QACCB0003SJ00	J		AC Power Supply Cord [For U.K.]
1	QACCE0002SJZZ	J		AC Power Supply Cord [Except for U.K.]
2	QANTL0001SJZZ	J	AK	AM Loop Antenna
3	QANTW0002SJZZ	J	AH	FM Antenna
4	QCNWH0009SJZZ	J		Speaker Wire
5	RRMCG0043SJSA	J	AT	Remote Control
5- 1	GCABB1064SJSB	J		Battery Lid,Remote Control
6	SPAKA0118SJZZ	J		Packing Add.,Left
7	SPAKA0119SJZZ	J		Packing Add.,Right
8	SPAKC0208SJZZ	J		Packing Case
9	SPAKZ0066SJZZ	J		Pad,Accessories
10	SPAKZ0067SJZZ	J		Support Pad
11	SSAKA0009SJZZ	J	AE	Polyethylene Bag,Accessories
12	SSAKH0018SJZZ	J		Polyethylene Bag,Unit
13	TCADN0003SJZZ	J		Register Card [U.K.Only]
14	TINSE0082SJZZ	J	AF	Operation Manual [For U.K.]
14	TINSZ0126SJZZ	J	AP	Operation Manual [Except for U.K.]
15	TINSE0083SJZZ	J	AD	Quick Guide [U.K.Only]
16	SPAKZ0061SJZZ	J		Polyethylene Bag,Speaker
17	TLABE0108SJ01	J		Label,Bar Code
18	TLABN0172SJZZ	J		Label,Serial No. [Except for U.K.]
19	TLABN0180SJZZ	J		Label,Serial No. [For U.K.]
20	TLABZ0067SJZZ	J		Label,Serial No. [Except for U.K.]
21	UBATU0003SJZZ	J		Battery (UM-4) (Not Replacement Item) [Except for U.K.]
22	SPAKA0110SJZZ	J		Packing Add.,Speaker [Top/Bottom]
23	SPAKS0006SJZZ	J		Sleeve Carton,Speaker

P.W.B. ASSEMBLY (Not Replacement Item)

⚠	PWB-A1~4	DCEKMV182SJ03	J	BS	Main/Terminal/Motor/Holder
	PWB-B1~5	DCEKNV182SJ03	J	BH	Display/Switch/Switch/Led/Led
	PWB-C1,C2	DCEKJV155SJ03	J	BF	Tuner/Holder
	PWB-D	QPWBF3895AFZZ	J	AC	CD Motor (PWB Only)
	PWB-E	9GD192121303	J	AZ	Tape Mechanism PWB Ass'y
	PWB-F	9GD192121304	J	AW	Tape Mechanism PWB Ass'y

OTHER SERVICE PART

	UDSKA0004AFZZ	J	AZ	CD Pickup Lens Cleaner Disc

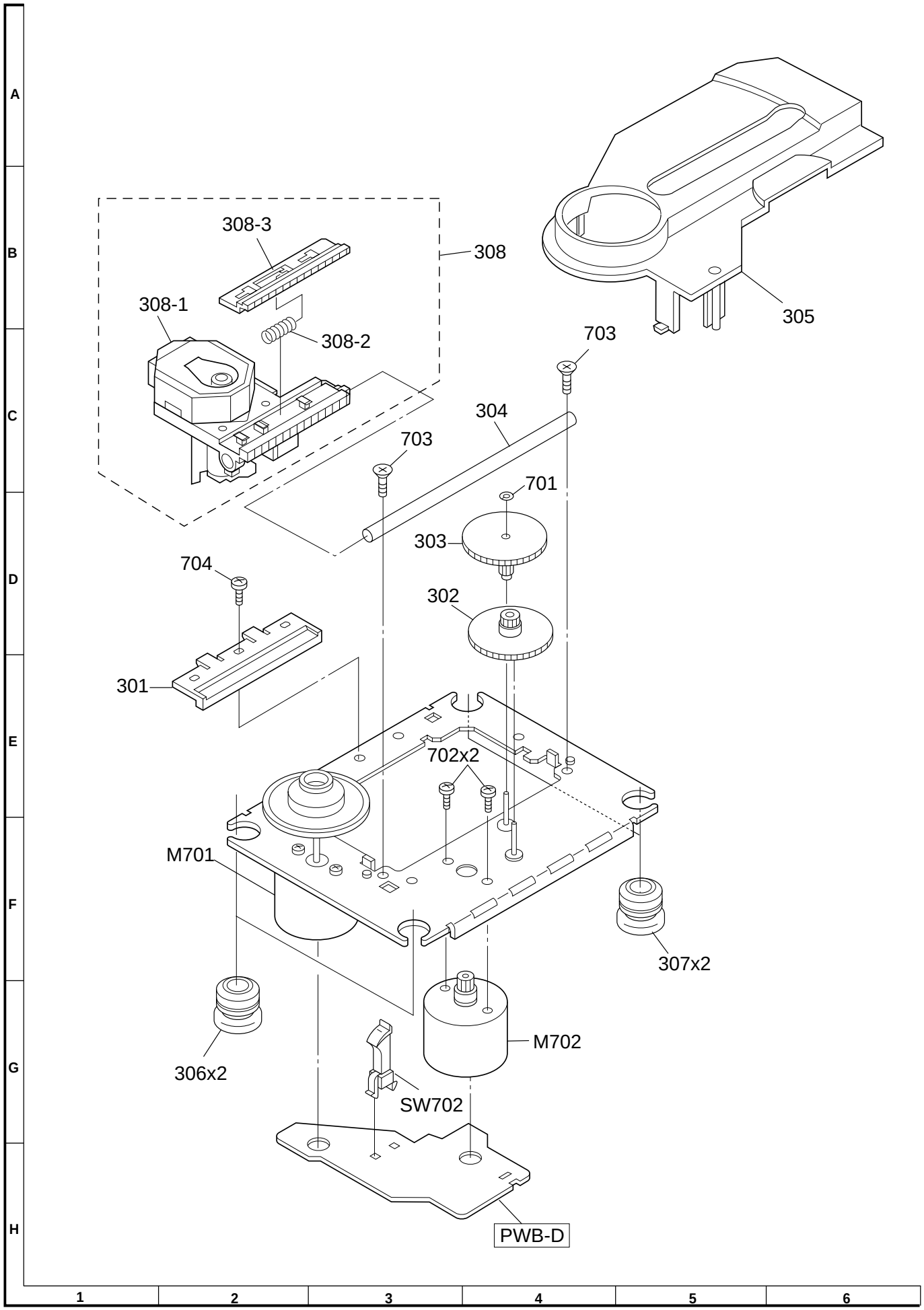


Figure 7 CD MECHANISM EXPLODED VIEW

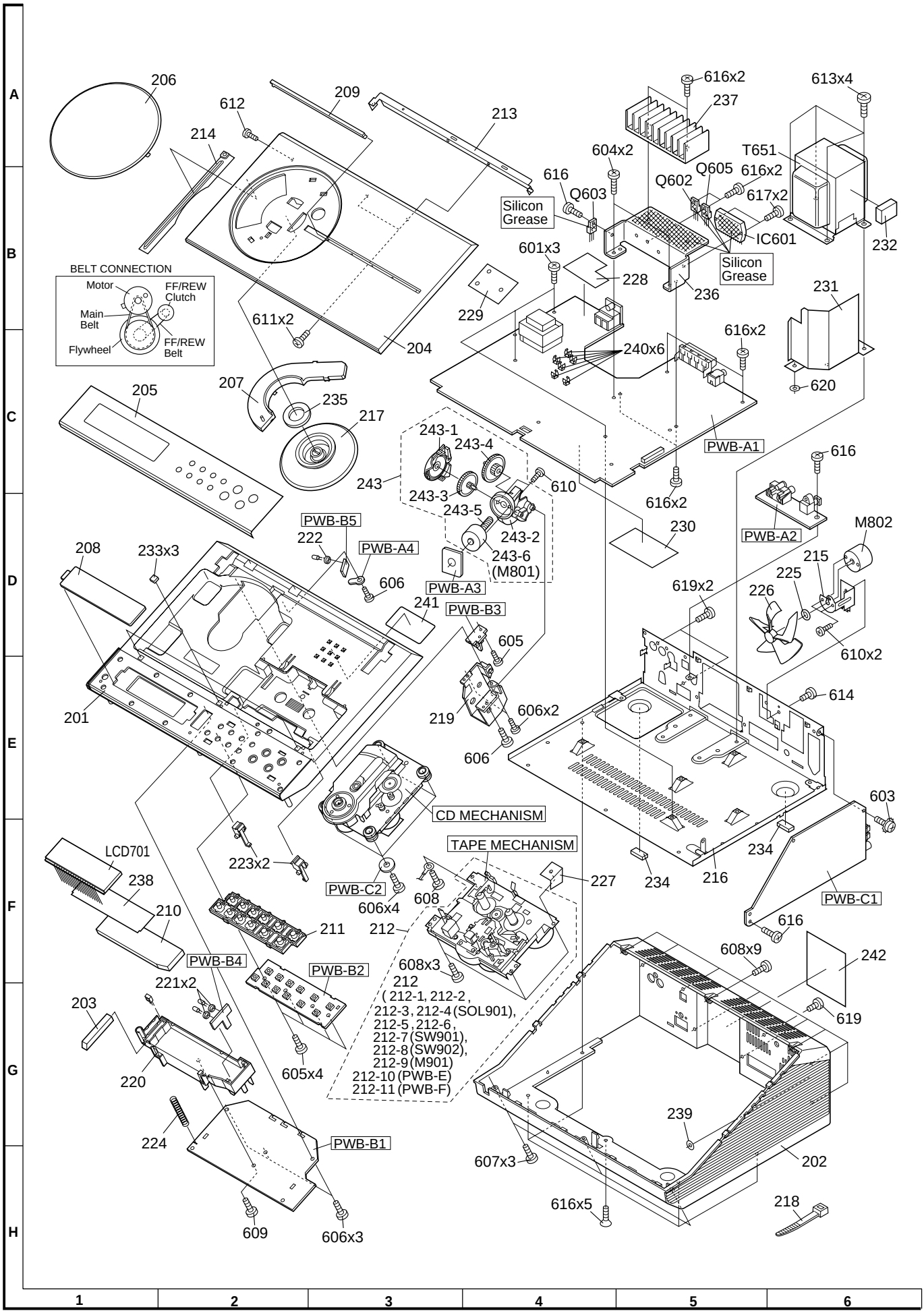


Figure 8 CABINET EXPLODED VIEW

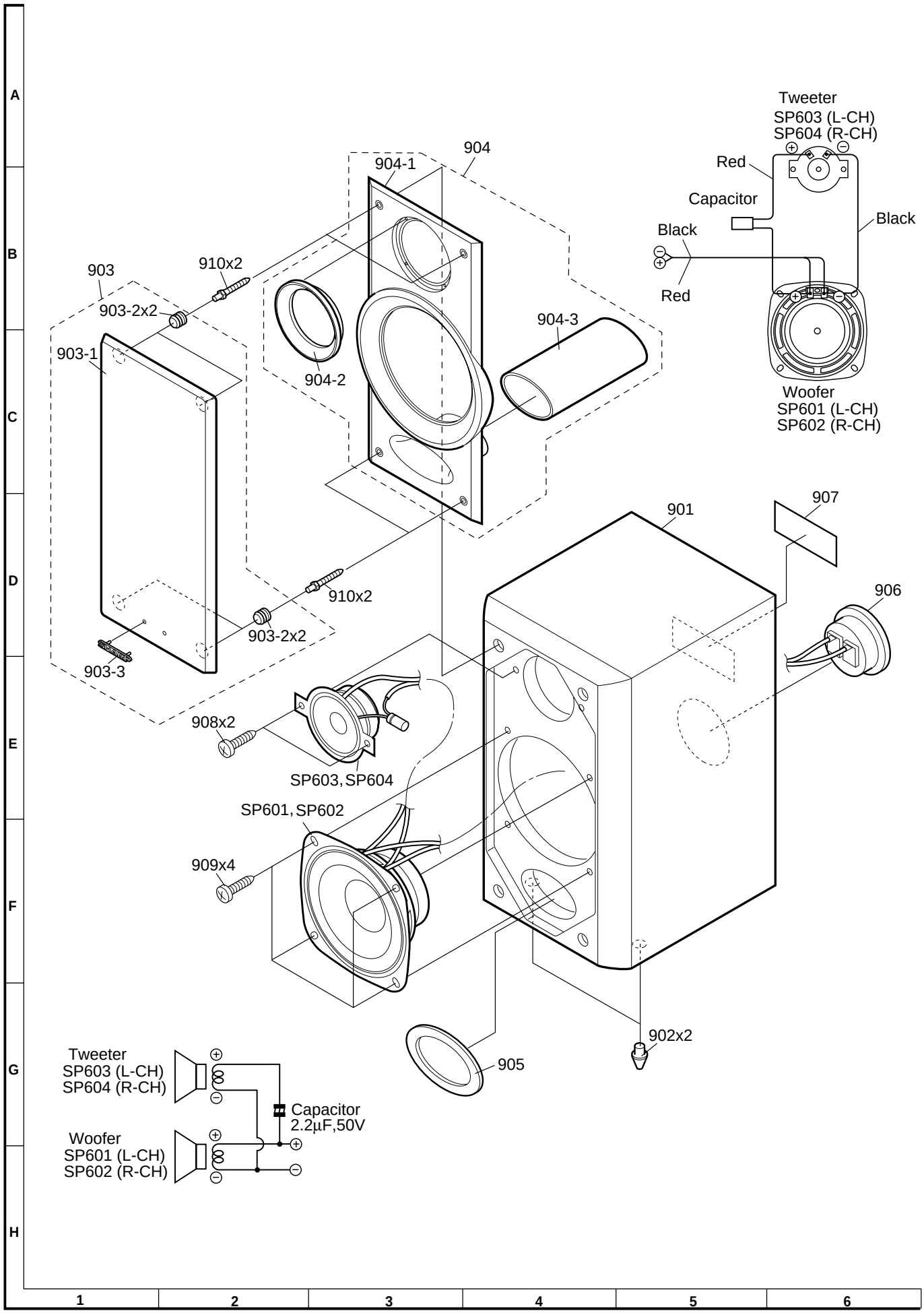
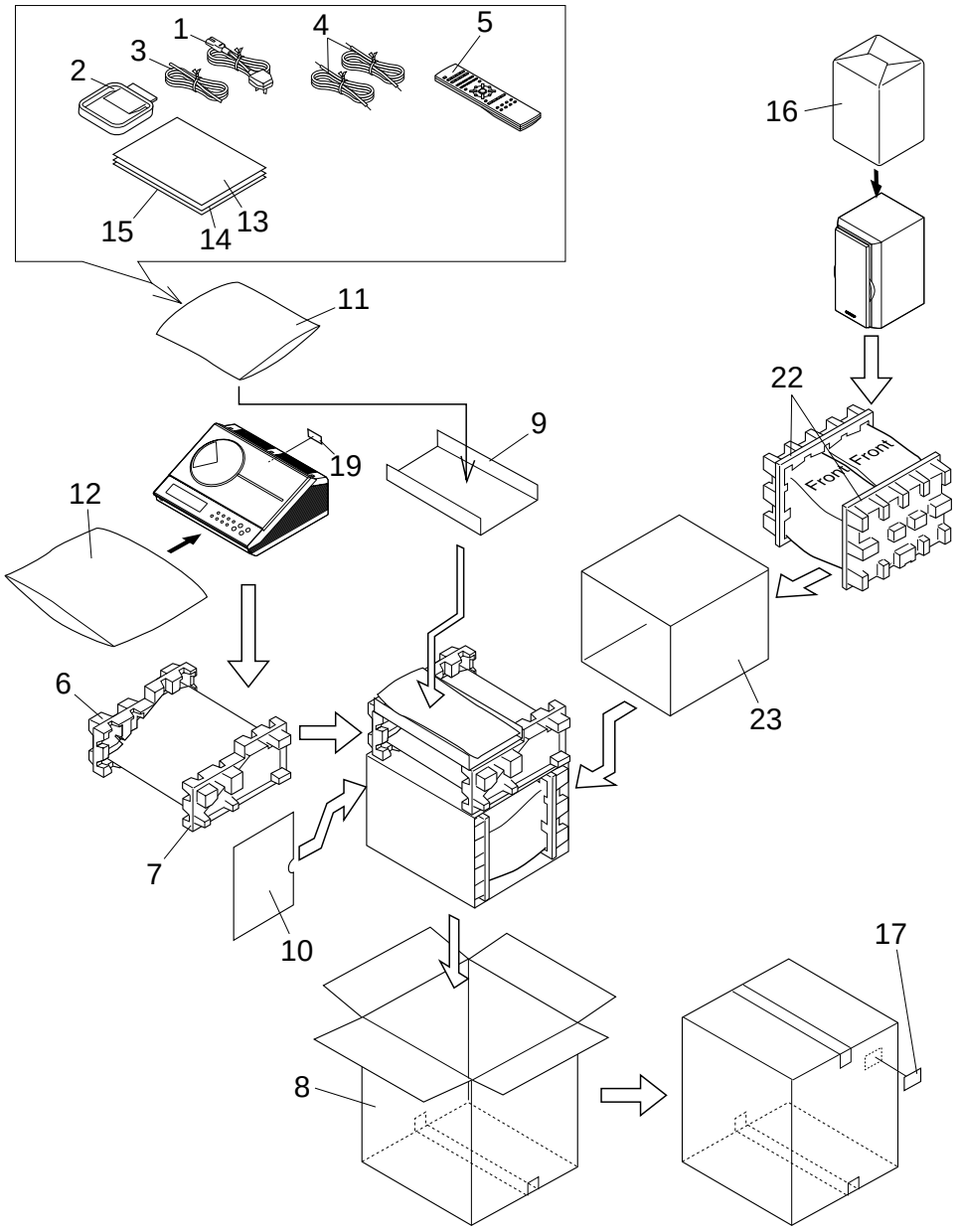


Figure 9 SPEAKER EXPLODED VIEW

PACKING METHOD (FOR U.K. ONLY)

1. AC Power Supply Cord	QACCB0003SJ00	11. Polyethylene Bag, Accessories	SSAKA0009SJZZ
2. AM Loop Antenna	QANTL0001SJZZ	12. Polyethylene Bag, Unit	SSAKH0018SJZZ
3. FM Antenna	QANTW0002SJZZ	13. Register Card	TCADN0003SJZZ
4. Speaker Wire	QCNWH0009SJZZ	14. Operation Manual	TINSE0082SJZZ
5. Remote Control	RRMCG0043SJSA	15. Quick Guide	TINSE0083SJZZ
6. Packing Add., Left	SPAKA0118SJZZ	16. Polyethylene Bag, Speaker	SPAKZ0061SJZZ
7. Packing Add., Right	SPAKA0119SJZZ	17. Label, Bar Code	TLABE0108SJZZ
8. Packing Case	SPAKC0208SJZZ	19. Label, Serial No.	TLABN0180SJZZ
9. Pad, Accessories	SPAKZ0066SJZZ	22. Packing Add., Speaker [Top/Bottom]	SPAKA0110SJZZ
10. Support Pad	SPAKZ0067SJZZ	23. Sleeve Carton, Speaker	SPAKS0006SJZZ

Setting position of switches and knobs	
CD Lid	CLOSE



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